AGRICULTURE, RURAL DEVELOPMENT AND RELATED AGENCIES APPROPRIATIONS FOR 1987

HEARINGS

BEFORE A

SUBCOMMITTEE OF THE

COMMITTEE ON APPROPRIATIONS
HOUSE OF REPRESENTATIVES

NINETY-NINTH CONGRESS

SECOND SESSION

SUBCOMMITTEE ON AGRICULTURE, RURAL DEVELOPMENT AND RELATED AGENCIES

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PART 7

TESTIMONY OF MEMBERS OF CONGRESS AND OTHER INTERESTED INDIVIDUALS AND ORGANIZATIONS

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AGRICULTURE, RURAL DEVELOPMENT, AND RELATED AGENCIES APPROPRIATIONS FOR 1987

MONDAY, APRIL 14, 1986.

TESTIMONY OF MEMBERS OF CONGRESS AND OTHER INTERESTED INDIVIDUALS AND ORGANIZATIONS

CRABTREE CREEK FLOOD CONTROL

WITNESS

HON. WILLIAM W. COBEY, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NORTH CAROLINA

Mr. WHITTEN. The Committee will come to order.

We are pleased to have our members and the public as witnesses today.

We all have had many problems and the Office of Budget and Management is faced with some problems. The county has about twice as much debt as we had five years ago. It constitutes a real problem.

Then we have the Gramm-Rudman bill, which applies a 4.3 percent cut to the existing programs in 1986, and then additional cuts are proposed for the coming year.

In the 1987 Budget the Office of Budget and Management has asked for drastic reductions in agriculture, far beyond what it has asked for elsewhere. It proposes to cut 4-H Club work, the Extension, and Soil Conservation. Just everything you can name is drastically cut by the recommendations of the Office of Budget and Management.

Our colleagues on the other side of the Capitol have also adopted a rule that they cannot add anything to the budget without cutting something else an equal amount. This is creating real problems when we go to conference.

I know Mrs. Smith, and all the members of the Committee, consider agriculture as the basic industry of this country. It is by far the biggest industry. It has in the past been the greatest earner of dollars in world trade. It furnishes the most economical and best diet that any nation has ever known.

So we think OMB is working in the wrong ways, particularly when the cuts they propose do not go on the deficit or the debt, but go to increase money available for increased foreign aid and military carryover of unexpended balance.

So we are counting on your help to strengthen our hand in an effort to restore these proposed cuts to the degree that we can. I think history shows that you cannot let the bottom fall out of agriculture as this proposal would do.

I talked to the National Association of Soil Conservation Districts Convention this morning. What we have here is a case of trying to do away with agriculture, to move it over some place else. We have had folks running various activities of the Department who are not in accord with the program they are handling. That being true, it is a most serious time in this country. And, as I explained to the National Association of Soil Conservationists, unless the farmer can make some money, we do not need these programs. And I told the Farm Bureau the same thing as you know. They do not need a manager if they have lost the farm.

Everybody is busy trying to look after the Farm Credit System. The first thing FCA does is cut out everybody who is a risk and let the FmHA handle it. The law has not been changed and this is not required. But the testimony before us shows that is happening. And the banker who is in charge of the Farmers' Home Administration is requiring farmers to come in and show how much they are in arrears in payments—due to the fact that our government has not exported their production—plus showing as to what it will take to live, plus what cash flow they expect under the new Farm Bill. And then he is deciding they cannot make it.

So farmers are talking, most of them, about not applying. FmHA is now approving only one out of three applications made. That is a serious situation.

Now, I want you to know we are up against a budget ceiling, and we are up against budget regulations. Also, we are up against the fact that the various farm groups are not working together to get adequate farm income. We do not need any Department if we have no farmers making money.

I mention that here because this is the record before us. Now, in the bill that we have got coming up tomorrow—and many folks complained, but we did not take away anybody's business—we said that, when folks are going broke like they are, let us go back to the old law where farmers made money and bought the land they are losing now. And that is in the bill that the Appropriations Committee voted out. And the Rules Committee kept it in there so they can vote on it tomorrow.

But I repeat, we have not taken over anybody's business. We are not writing the law. We said, in view of how this one is working, let us go back to the old law where farmers made money and bought the land they are now losing.

We need your help and everybody else's help if we are going to save this country. And I think the record shows too that we have got 335 overseas military establishments. We have still got 41,000 people in South Korea.

So I am just trying to say that we on this committee are on the right side, in my judgment, trying to take care of our own country, which is what we have to look to, to take care of these other things.

So, beginning with that, we will turn to our colleague, Congressman Cobey of North Carolina.

Your complete statement will appear in the record, and you might proceed as you wish.

Mr. Cobey. I have a short statement I would like to read if I could.

Mr. Whitten. Go ahead, sir.

Mr. Cobey. Mr. Chairman, I appreciate as a fellow member you allowing me to appear before your Committee, and I appreciate your remarks. And I know there are a lot of things that we can look at within the budget.

I am here today to urge the Subcommittee to appropriate enough funds in fiscal 1987 to continue projects begun under the Soil Conservation Service's watershed and flood prevention program. The Federal Government has made a commitment to each of these projects, and I believe that those commitments should be honored.

My interest in this issue stems from the presence of a Soil Conservation Service project in my district. The Crabtree Creek Flood Control Project is located just north of Raleigh, North Carolina. It consists of a series of 11 dams designed to prevent flooding in that area.

The $22.5 million cost of the Crabtree Creek project is shared equally by the Soil Conservation Service and Wake County. The State of North Carolina also has contributed a small amount to the work.

Construction on Crabtree Creek began in 1979, and the project is very nearly finished. Nine of the 11 flood prevention structures have been completed, and the tenth one is under construction. However, $4.5 million in Federal funds is needed in fiscal year 1987 to complete design work and construction on the largest and most important structure in this project, the 11th dam. If this $4.5 million is appropriated, the Federal Government's commitment to the Crabtree Creek project will have been met.

During the 16 years of building this flood prevention project, local and State officials have lived up to their part of the bargain. They have sought the necessary easement and have appropriated their share of the funds.

It would be wrong for the Federal Government, after 16 years of helping with the construction, to withdraw suddenly its commitment to the Crabtree Creek project.

I realize the budget constraints, as you mentioned earlier, that this Committee faces. We do need to balance the budget, and I support your efforts to achieve that goal. However, we cannot ignore—and I feel like you agree with me on that—the sudden impact on local government budgets if Congress withdraws completely Federal support for ongoing flood control efforts as the Administration has proposed.

If Congress were to eliminate funds for the Crabtree Creek project, for example, Wake County would have tremendous difficulty taking over the remaining Federal share of the project. The project may very well go unfinished for many years.

Already, Wake County has spent two to three times the amount originally estimated for the land rights required by the Crabtree Creek project. This is because land values in the county have increased dramatically as a result of high technology growth industry in the Research Triangle Park.

The high growth in our area means that there are many more demands on Wake County than there were back in 1970 when the

Crabtree Creek was first started. The county must meet more law enforcement, water, transportation, and education needs as the region continues to attract more jobs and more people. The county is counting on the Federal Government living up to its agreement to fund part of the Crabtree Creek project.

The watershed and flood prevention program takes up roughly $638.2 in the SCS budget. According to SCS officials, this section of their budget usually includes about 20 new projects each year.

Rather than withdraw Federal commitments to existing projects, I believe it would be more logical to reduce, or eliminate if need be, any new flood control efforts that have been proposed.

Again, I realize the budget constraints placed upon the members of this Subcommittee and all of us in Congress. However, I hope that you will consider the potential impact on local governments if Federal support of ongoing projects is suddenly withdrawn.

I and many others appreciate your support of a stable flood control program in the past, and we hope that you will consider the situation as you develop this year's SCS budget.

Thank you, Mr. Chairman, for allowing me to appear before you.

Mr. WHITTEN. I say again one of our problems is what we wish to do—

Mr. COBEY. Yes, I understand.

Mr. WHITTEN. But we have severe cuts in the agricultural budget before us. Also, we have the Gramm-Rudman bill requirements. So we are just faced with a real tight situation.

I think for the first time, our friends on the other side, the Senate, has adopted rules whereby, if increases are made, they have to make additional cuts at the same time.

Now, I am sure this Subcommittee has been kind of independent, within the limits of the possible, in trying to look after our own country and our agriculture. But there is a limit as to what we can do.

We appreciate your appearance, Mr. Cobey.

Mr. COBEY. I understand.

Thank you, Mr. Chairman. Thank you, Mr. Myers. It has been a busy day.

[The statement of Congressman Cobey follows:]

CONGRESSMAN BILL COBEY'S TESTIMONY ON
THE CRABTREE CREEK FLOOD CONTROL PROJECT
BEFORE
THE HOUSE SUBCOMMITTEE ON AGRICULTURE, RURAL DEVELOPMENT, AND RELATED AGENCIES
April 14, 1986

Mr. Chairman, thank you for the opportunity to appear before this Subcommittee.

I am here today to urge the Subcommittee to appropriate enough funds in fiscal 1987 to continue projects begun under the Soil Conservation Service's watershed and flood prevention program. The federal government has made a commitment to each of these projects, and I believe those commitments should be honored.

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It would be wrong for the federal government, after 16 years of helping with construction, to withdraw suddenly its commitment to the Crabtree Creek project.

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Rather than withdraw federal commitments to existing projects, I believe it would be more logical to reduce, or eliminate if need be, any new flood control efforts that have been proposed.

Again, I realize the budget constraints placed upon the members of this Subcommittee and all of us in Congress. However, I hope you will consider the potential impact upon local governments if federal support of ongoing projects is suddenly withdrawn.

I and many others appreciate your support of a stable flood control program in the past. We hope you will consider our situation as you develop this year's Soil Conservation Service budget.

Thank you for your time and your consideration.

MONDAY, APRIL 14, 1986.

EASTERN ARKANSAS CONSERVATION PROJECT

WITNESSES

RANDY YOUNG, EXECUTIVE DIRECTOR, ARKANSAS SOIL AND WATER CONSERVATION COMMISSION

TOM L. RILEY, JR., EXECUTIVE VICE PRESIDENT, ARKANSAS ASSOCIATION OF CONSERVATION DISTRICTS

JEFF ELLIS, DISTRICT CONSERVATIONIST, USDA SOIL CONSERVATION SERVICE, JACKSON COUNTY, ARKANSAS

E. E. "GENE" GANN, CHIEF, ARKANSAS DISTRICT, U.S. GEOLOGICAL SURVEY

Mr. WHITTEN. We now turn to Mr. Randy Young, Mr. Ellis, Mr. Riley and Mr. Gann, representing the Arkansas Soil and Water Conservation Commission.

Our colleague, Mr. Alexander had hoped to be here. He has a series of questions. So let us have your statement and then we will give you his questions which you can answer for the record.

We are glad to hear from you.

Mr. YOUNG. Pleased to be here. Thank you, Mr. Chairman.

My name is Randy Young, and I am the Director of the Arkansas Soil and Water Conservation Commission. I do have the leadership of our State Association of Conservation Districts with me, as well as a couple of technical experts who are working day to day with this project to assist in answering questions.

I do have a prepared statement that I would like to submit to have included for the record.

Mr. WHITTEN. We will be glad to have that included and you can hit the highlights.

Mr. YOUNG. Let me just summarize four or five key points about this project, and start out by talking about the problems that we are trying to address with the project.

It covers the Arkansas Delta part of Arkansas, which is 26 Eastern Arkansas counties, and that is heavily agricultural production area. We have 6.5 million acres under cultivation and about 40 percent of that acreage is being irrigated. And from 1960 to 1980, that was over a 500 percent increase in the amount of groundwater being pumped.

The net result of all of that is today we have pumping exceeding natural recharge in that groundwater up for about 17 percent. So what we are trying to accomplish with the study is basically twofold: first, in the area of water conservation to increase irrigation efficiency, both at the pumping plant and the application process and thereby reduce the amount of water actually being pumped, and also reduce the energy costs associated with pumping of that water which would be a direct benefit to our farmers in Eastern Arkansas.

The second phase of it is to develop some water management tools to assist us at the State local level and moving in the future toward what we term conjunctive water management of surface and groundwater. Our overall objective is to achieve a sustained yield pumping level from the groundwater and then provide part of the total water need by developing supplemental surface water.

The State of Arkansas has made a financial commitment to water resources development and management that I wanted to highlight for you just briefly.

The State is authorized the Soil and Water Commission to issue $100 million worth of State general obligation bonds to finance water resources development. They have also authorized the issuance of State tax credits as an incentive for developing surface water to reduce the demand underground water. They have also mandated that we revise and update our State water plan, and this project is helping immensely in doing that in that one of the major things we are to do is to determine the amount of groundwater that is available in the State on a long-term basis, and this project is instrumental with helping us do that.

The benefits of this project are not just limited to the State of Arkansas. Mr. Chairman, I have been to Mississippi and have spoken to your Annual Water Conference about this project. There is a lot of interest in the State of Mississippi because of the similar groundwater situations that exist. And there is a lot of potential application for the benefits in your State.

And probably the thing that is most important to me about this project that is really impressive to me is that this project was not one that was conceived by a bureaucrat like myself or one of our Federal agencies. It was initiated locally by our Conservation District Directors in Jackson County. And there is probably more local support, more volunteers working on this project, more interest on the part of the average citizen throughout Eastern Arkansas than any other project I have ever been associated with.

Now, you mentioned earlier in your opening comments about the need for agencies to work together. This project, I think, is probably a model for others to strive for with the cooperation and coordination that exists with this project. We have our 26 conservation districts involved. We have the State Soil and Water Commission involved, the Soil Conservation Service, the USGS, the Corps of Engineers, the well builders in Eastern Arkansas, plus the irrigation suppliers are all actively involved in this project.

And there are other studies that we are able to coordinate and to pool the actual total dollars that are available and to get more water accomplished with the total dollars involved than would otherwise be possible.

With that, I will close, and appreciate the opportunity to come and testify about the Eastern Arkansas Water Conservation Project. And we will be happy to answer any questions.

Mr. WHITTEN. Well, as you know, I am more or less familiar with the many flood problems you have had in Arkansas through the years. I have traveled across it.

What bothers me is the shortsightedness of somebody at the budget level, and that is just not limited to this Administration. It has been true all along.

As we put more and more land under concrete, and as we have more and more things that destroy timber, and with the fires we have had in the last month we are going to have to fight like everything to keep the status quo. We are going to backslide if we do not pay clear attention to it. We appreciate your problem.

However, the information that is being collected here will be used in other areas outside of Eastern Arkansas. The question is—how to follow through with the results of this study. How will the information be used; who is involved in this irrigation study; what is each contributing to the study?

Unless you think it is fully covered in your statement I wish you would provide this for the record. These questions should be answered, and if you do not think the answers here are full enough, you should go by his office and add to your testimony.

Mr. YOUNG. Mr. Chairman I believe that our prepared statement——

Mr. WHITTEN. I think it does too, but in case you feel it should be added to, feel free to do so.

Mr. YOUNG. Let me check and see if my cohorts have anything they want to add.

Mr. WHITTEN. You do not have to decide right now. I am just giving you the privilege of doing it, should you want to.

Thank you very much for your appearance.

Mr. YOUNG. Thank you, Mr. Chairman.

Mr. WHITTEN. Incidently, we have tried to get the country to realize that the Mississippi River and its tributaries serve about 41 percent of the country. On the House side, we did adopt an amendment which shows that this is a national problem. It was authorized in 1928, and all its parts are part of the authorization.

We do not seem to have had the same luck on the other side of the Capitol. I hope we can count on your help to hold what the House has done to prevent this 25 percent contribution. If not, we have eliminated flood control in a big part of the lower Mississippi.

Mr. YOUNG. Thank you very much.

[Mr. Young's statement follows:]

TESTIMONY OF THE ARKANSAS SOIL AND WATER CONSERVATION COMMISSION

Before the

Appropriations Sub-Committee on Agriculture,
Rural Development, and Related Agencies
Concerning
The Eastern Arkansas Water Conservation
Project

April 14, 1986

Randy Young, Executive Director of the Arkansas Soil and Water Conservation Commission, presents the following testimony concerning the need for continued funding of the Eastern Arkansas Water Conservation Project.

The ASWCC is responsible for state programs including Soil and Water Conservation, State Water Planning, Water Resources Development and Financing, Water Rights, Flood Control, Floodplain Management and Dam Safety. Development of sound state level policy for the wise use and development of the state's soil and water resources is a primary objective.

First I am deeply concerned about the proposed reductions in conservation programs. The proposed budget reductions would seriously damage successful programs in Arkansas. Flood prevention, Resource Conservation and Development, and Reclamation of Abandoned Mines are very important to Arkansas. Impaired drainage and floodwater damages are continuing to greatly limit agricultural production in Arkansas, thereby having a serious adverse impact on the state's economy. According to the 1977 Arkansas Resource Base Report, developed as part of the Arkansas Statewide Comprehensive River Basin Study by the U. S. Department of Agriculture in cooperation with the Arkansas Soil and Water Conservation Commission, approximately 3,350,000 of the 8,040,000 acres of cropland are being adversely affected. The report further estimates that impaired drainage and flood damages are reducing Arkansas' agricultural production by about $160,000,000 annually.

The Eastern Arkansas Water Conservation Project encompasses 26 counties of eastern Arkansas having a land area of about 12.1 million acres. There are about 6.5 million acres in cultivation of which 41 percent was irrigated in 1982.

Agriculture is Arkansas' major industry and is vital to the economy of the state and the nation. The value of crops produced in 1981 was close to $2 billion. The major portion of the crops produced in Arkansas is grown within the 26-county project area which also includes the major rice producing area within the United States.

In 1981, 1.6 million acres of rice was grown, which is 3 times greater than the amount grown in 1971. Soybean acreage ranges from 4.5 to 5.5 million acres. Eastern Arkansas grain production is not only important to the Arkansas economy, but plays a vital role in the United States and world food supply.

Production trends are affecting water resources in eastern Arkansas because irrigation farming is increasing at a rapid pace. Forty-four percent of rice-beans-cotton acreage was irrigated in 1981 compared to 26 percent in 1978. It is estimated that 9 million acre-feet of water was pumped for irrigation in 1981.

Ninety percent of the irrigation is supplied from the groundwater which is being depleted. Withdrawals of water for irrigation in the 26-county area increased from 700 million gallons per day in 1960 to 3,700 million gallons per day in 1980.

Nearly 7,000 wells have been drilled since 1980 in eastern Arkansas. This represents a 33 percent increase in the total number of wells in place at that time. Annual water-level declines of 0.3 foot to 0.5 foot per year are common in most parts of the area, but as a result of increased withdrawals during the drought of 1980, declines in that year averaging as much as 5 feet occured in some counties.

Water users concerned about the prospect of groundwater shortages and quality deterioration of irrigation supplies, turned to the Jackson County Conservation District for assistance.

The Conservation District started monitoring irrigation wells on a limited basis in 1983 with a grant from the Arkansas Soil and Water Conservation Commission. Realizing that groundwater problems couldn't be resolved on a county basis, the District requested assistance from the Congressional Delegation in order to expand the area to cover eastern Arkansas.

The Soil Conservation Service provided funding for the Eastern Arkansas Water Conservation Project for the first time in 1984, through a $450,000 appropriation provided by Congress.

THE PLAN OF STUDY

The study plan outlined two major purposes:

1. Increase irrigation efficiencies to reduce the amount of water pumped and energy consumed through improved water management practices and techniques.
2. Develop a series of calibrated digital models of the alluvial aquifer to be used by state and federal agencies for assessing the impact of projected irrigation demands and for evaluating alternative pumping schemes that could involve the conjunctive use of surface and groundwater.

Agencies cooperating in the study are the 26 conservation districts, Arkansas Soil and Water Conservation Commission, USDA-SCS, U. S. Geological Survey, University of Arkansas at Fayetteville and University of Arkansas at Pine Bluff. Assistance is also being provided by the Cooperative Extension Service and the U.S. Army Corps of Engineers.

Benefits Already Realized

Probably the most important benefit already derived from the project is the awareness created throughout the farming community of the need to use our water resources wisely in order to protect the resource base and the quality of the environment. The rising cost of energy needed to supply irrigation water and the declining water table created a concern throughout the 26-county area. The farmers knew something had to be done but did not know exactly where to begin. This project has given them a source of information for making decisions related to conserving water resources. The project has been well received by District Directors, agri-related organizations, farmers, community leaders and the local citizens in the communities involved. There has probably been as much or more individual involvement on a volunteer basis for this project than any we have ever sponsored. Even though the project has only been in place for two irrigation seasons, many benefits have already been reaped and the information will be available to benefit others as the data is published. For example:

1. Pumping plant evaluations indicated that most of the pumping plants are operating at efficiencies of 50 percent to 60 percent of the national standards. Many farmers have already used data from the evaluations to make adjustments to increase their pumping efficiencies.

2. Delivery loss evaluations have shown that 30 percent to 40 percent of water pumped into open earthen canals is being lost.
3. Application efficiencies on rice have been raised from a low of 40 percent on some fields to an average of 72 percent and furrow irrigation has been raised from a low of 43 percent to an average of 72 percent.
4. Season-long studies are providing information on water use, energy consumption, soil/water relationships, efficiencies, and economics.

The Final Product

The final output of the study will:

1. Develop a series of calibrated digital models of the alluvial aquifer to be used by state and federal agencies for assessing the impact of projected irrigation demands and for evaluating alternative pumping schemes that could involve the conjunctive use of surface water and groundwater.
2. Provide assistance to landowners to increase irrigation efficiencies and potentials for saving water and energy through improved water management practices.
3. Provide water use information by soil types, crops, and irrigation methods.
4. Provide updated information that can be incorporated into a meaningful State Irrigation Guide.
5. Provide an educational means for promoting irrigation water management to be made available to all interests including farmers, state and local agencies, well drillers, and legal entities.
6. Provide information that may serve as the basis for further investigation and the study of potential aquifer recharge locations either by artificial or natural means.

The results of this project will be useful not only to the conservation districts, ASWCC and Soil Conservation Service in their responsibilities of providing sound water conservation assistance to irrigation farmers, but will serve as resource information for the use of all other agencies and groups concerned with water resources in Arkansas.

The information gained can be used by decision makers as a basis for stabilizing the water supply in Arkansas. Only through the integration of surface and subsurface water management can crop production in Arkansas be sustained. In order to accomplish this, efforts of all agencies must be coordinated and directed toward common goals, i.e., advancing technology in irrigation water management, developing programs for groundwater conservation and recharge, better utilization of the surface water resource and the dissemination of both technology and conservation information to agricultural and non-agricultural users.

Summary and Future Needs

The State of Arkansas in 1985 made a significant committment to both water conservation and conjunctive management of surface and groundwater with the passage of Acts 417 and 1051. It is of interest to note that this direction is a result of concern exhibited on the local level for the long term future of our water resources. These legislative actions are coupled with a strong financial committment in excess of $100 million at the state level for water resources development and management. The EAWCP is an essential component of Arkansas' Comprehensive Water Management Program and the continued support at the federal level in this partnership is imperative.

The study will need to continue through FY-89 in order to answer the groundwater questions, to make water-use evaluations with different seasonal conditions and to cover all irrigation methods, crops, and major soil types. The annual cost is estimated to be $762,000 including $475,000 from the Soil Conservation Service and $287,000 from state and local funds.

The ASWCC appreciates the opportunity to testify about this matter.

MONDAY, APRIL 14, 1986.

SOIL AND WATER CONSERVATION

WITNESS

CLARENCE DURBAN, PRESIDENT, NATIONAL ASSOCIATION OF CONSERVATION DISTRICTS

Mr. **WHITTEN**. We now have Mr. Clarence Durban. Mr. Durban, did you bring my $3?

Mr. **DURBAN**. Yes, sir, I did, but I have it in my pocket. I probably need it for cab fare to get back, however.

Mr. **WHITTEN**. I spoke down there this morning, and when I finished, there was $3. I said that was the poorest honorarium I ever was offered. [Laughter.]

Mr. **DURBAN**. I did inform the Congressman, however——

Mr. **WHITTEN**. But I gave it back to them. I just wanted to enjoy the conservationists anyway.

Mr. **DURBAN**. He did. I have got it here in my pocket and I did suggest that, based on what he said and how well we liked it, he might get more. But I still have $3.

Mr. **WHITTEN**. We are glad to hear from you.

Mr. **DURBAN**. Thank you, Mr. Chairman. It is a privilege to be here, members of the Committee.

I am the President of the National Association of Conservation Districts. It is indeed a privilege for us to appear here, but rather than say that I appear as the President of the National Association, I would just like to point out that I am also appearing as a representative of 17,000 district volunteers across this country as district supervisors, which I am one of those, having served for 25 years in that volunteer position in the protection and working for the protection of the resources of this Nation and working for the improvement of water quality.

I believe that we share with you many of the suggestions that you have made insofar as the costs that this Nation faces at this point in time, the fiscal responsibility that we almost accept, and recognizing that I, as a farmer, and all farmers and everyone else in this country look at that deficit and realize that something needs to be done.

Defense is an issue that I believe and the National Association believes is of great importance to this Nation. Part of that defense is resources that we have. The very fact that we have the production and the fact that we have the kind of kind of a standard of living that we have comes because of the protection of those resources that we now have. And all we need do is look at some other countries—Ethiopia, for instance—that have been a thousand years getting to the condition that they are in. Yet we are going at that same kind of a situation at the rate of about 30 to 40 years is as long as we have been involved with the kind of erosion that they have experienced.

As I reiterate again, the pressure that you are under for fiscal restraint is shared by the Association. We believe, however, that a tremendous investment has been made in the Soil Conservation program to this Nation over the past 50 years, and tremendous progress has been made.

We think, from that standpoint, the protection of that kind of investment needs to be considered.

We recognize that the loss of that particular investment jeopardizes our ability to feed ourselves as it was appearing would happen back in the thirties when this program was initiated.

I suggest that the President, in his remarks of sometime ago, quoted President Teddy Roosevelt. And President Roosevelt said on the subject of resource conservation: "The Nation behaves well if it treats the natural resources as assets which it must turn over to the next generation increased and not impaired in value."

President Reagan used that very quote. And he added to that that those words must remain an inspiration to all of us, an obligation to everyone charged with the stewardship of our resources.

And I suggest to you that the conservation districts of America believe that those are not empty words, and we believe that those words should be supported to the fullest extent.

Nonpoint source pollution is an issue that we are faced with every day and, as a result of the problems of nonpoint source pollution, water quality is an aspect that can be addressed only by the control of that kind of pollution from land.

Conservation programs have provided that kind of needed treatment, that kind of technique that is necessary for that nonpoint source pollution control.

Conservation districts in this Nation are moving forward to address that problem. It is of vital importance to us. But we just cannot do it alone.

We believe, and I suspect that you agree, I believe comments that you have made say that, that erosion and the movement of sediment does not recognize county boundaries, State boundaries. It has national significance. We believe that a national program is needed to reach the water quality goals that we believe need to be met.

In addition to these points, we have the 1985 Farm Bill that encourages and even requires soil conservation efforts as you referred to this morning, sir, and we appreciate your thoughts on that.

We believe that the farmer is going to be needed to be provided with the tools to help him determine the capability of the land that is going into that reserve and determine the land that should be in that reserve and help him make the decisions on pillage, on the whole gamut of erosion problems that only a technical person trained in that category can do. And I need only cite as a very personal instance on my own farm some issues, some structures that I put there some three years ago, at a not minimal cost to myself, when there were no programs, no cost share, but most certainly the technical assistance was provided. And without that technical assistance, I would not have been able to have afforded the kind of structures that I built there which, in my estimation, was of greater benefit to the county highway that went through that farm, because of the sediment that could result in the road ditch and to a neighbor's house, garage and his property than it did to me. I felt a moral responsibility that it needed to be done. But without the technical assistance, I could not have accomplished it.

I believe for those and many other reasons, and without taking further of your time, sir, I believe that the Soil Conservation Service, a CS program, Extension Service needs to be continued and continued an ongoing program that we must have if we are going to control the kind of erosion that we see happening at the present time.

I will not take further time, sir, and I appreciate the time to appear before this Committee.

Mr. **Whitten**. Thank you. We appreciate your appearance. As I said earlier, your appearance means a whole lot. As I tell people from the Department of Agriculture, when we go to the floor we have to represent them, and the case we make is based on how much evidence we have.

We appreciate your appearance and the fine work your organization has done through the years.

Mr. **Durban**. Thank you.

Mr. **Whitten**. I repeat again, Conservation is neglected unless the farm makes money, and unless we have got an ACP program to help. Now, when all that is said and done, the farmer is out about two-thirds of the total cost. So I think it is a wonderful program, and I think we were wise in making certain that the new program, as good as it may be in this area, does not take over the old programs.

And so I think everything worked out. We passed a resolution from this Subcommittee which has been enacted into law to say that the new Conservation Reserve program cannot take over the old and successful ones.

Thank you for your appearance.

Mr. **Durban**. We appreciate that, sir, very much.

May I say that any time we can be of any assistance to this Committee, the National Association stands ready——

Mr. **Whitten**. Thank you. We will be calling on you tomorrow. [Laughter].

Mr. **Durban**. I have still got that $3 in my pocket.

Mr. **Whitten**. Thank you

[Mr. Durban's prepared statement follows:]

STATEMENT
by the

National Association of Conservation Districts
before the

Subcommittee on Agriculture, Rural Development and Related Agencies
House Committee on Appropriations
by

Clarence Durban, President
April 14, 1986

Program	FY86 Approp.	FY87 Budget	NACD Recommendation
		(in million dollars)	
SOIL CONSERVATION SERVICE			
Conservation Operations	363.3	362.0	363.3
Grants to States & Districts	-0-	-0-	-0-
Special Areas Cons. Prog.	-0-	-0-	-0-
River Basin Surveys	14.8	9.5	14.8
Watershed Planning	8.9	6.5	8.9
Watershed Operations	185.7	66.7	185.7
Emergency Flood Repair	45.0	1.1	5.0
Great Plains Cons. Prog.	21.4	-0-	21.4
RC&D	26.2	11.4	26.2
RAMP	(9.4)	(.8)	(9.4)
Total SCS Appropriations	665.9	457.7	625.9
ASCS			
ACP	188.9	-0-	188.9
FIP	12.4	-0-	12.4
Water Bank	8.7	-0-	8.7
Special Areas Cons.	-0-	-0-	-0-
Colorado River Salinity Prog.	-0-	-0-	-0-
Emergency Conservation Prog.	-0-	-0-	-0-
Total ASCS	210.0	-0-	210.0
AGRICULTURAL RESEARCH SERVICE			
Soil & Water Cons. Res.	62.0	62.1	62.0

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APHIS			
Animal Damage Control	19.0	10.0	19.0
COOPERATIVE STATE RESEARCH SERVICE			
Hatch Act	155.5	155.5	155.5
McIntire-Stennis	13.0	13.0	13.0
Rangeland Research	.5	-0-	.5
EXTENSION SERVICE			
General Formula Programs	229.7	127.5	229.7
Earmarked Programs	75.3	-0-	75.3
Renewable Resources Ext.	2.5	-0-	2.5
FARMER'S HOME ADMINISTRATION			
Rural Community Fire Prot.	3.3	-0-	3.3
Soil & Water Loans	28.0	-0-	28.0
Watershed Prot. & Flood Pre.	14.0	-0-	14.0
RC&D Loans	2.0	-0-	2.0

Mr. Chairman, distinguished members of the subcommittee, I am Clarence Durban, President of the National Association of Conservation Districts. Even more important than representing our national organization, I am here today to speak for the more than 17,000 volunteers who are the officials of this country's 2,940 conservation districts and their more than two million cooperating landowners.

Mr. Chairman, I will be brief. The reason I have volunteered to serve NACD and the Union County Soil and Water Conservation District in Ohio is quite simple. I, like you, believe that we must do everything within our power to leave the soil of our land and the water in our streams in better condition than we found it. I am also here because I am deeply concerned that the budget proposed by the Administration for soil conservation and natural resource programs would reverse that very concept.

If I may, I would like to quote President Teddy Roosevelt on the subject of resource conservation. He said, "The nation behaves well if it treats the natural resources as assets which it must turn over to the next generation increased, and not impaired, in value." In fact, President Ronald Reagan used that very same quote not two years ago in a speech he delivered. Mr. Reagan went on to say, "Those words must remain an inspiration to all of us; an obligation to everyone charged with the stewardship of our resources."

Mr. Chairman, America's conservation districts come to your committee today because those are not just empty words to us. We are spending our time and our energies to improve and protect the soil and water resources of this country. And we are here today because the message sent by the Administration in its budget is all too clear -- resource protection is not a concern of the federal government.

NACD strongly disagrees. A national program to control soil erosion and improve water quality necessitates a strong federal presence. Nature does not recognize property lines nor state boundaries. If we are to have an impact on resource protection on our private lands, the federal role must be maintained and that means continued funding for the Soil Conservation Service and the Agricultural Stabilization and Conservation Service.

NACD recommends that in FY 87 the federal government provide the program funds as shown in the above chart and, specifically, that SCS receive $625.9 million and that ASCS receive $210 million for soil conservation activities in FY 87.

I know that you, the members of this committee and all of Congress are under a great deal of pressure because of the federal deficit. Our members recognize the need for fiscal restraint, but there comes a time when we have to say this program is too important, it deserves to be maintained and further cuts would cripple the program. We have reached that point with our soil conservation programs.

Since 1977 the Soil Conservation Service alone has lost 25 percent of its purchasing power. In terms of constant dollars, we have seen a steady decline in the real federal commitment to soil conservation. NACD feels that we have reached the point where this trend must be stopped. We have invested too much and have too much at stake to falter now.

We currently have 288 million acres of private land in this country wit erosion problems. More than 180 million of those acres are for crop production. That is more than 40 percent of our total cropland base. To allow this land to degrade further is folly. But, under the Administration's budget proposal that is just what would happen. They would cut total federal soil conservation programs by 58 percent and I believe we would see that total of eroding acres increase.

That jeopardizes our ability to feed ourselves and our neighbors in this world. If anyone doubts that resource conservation is important to food production, just look at what is happening in Africa and many of the world's developing countries. The famine affecting those areas can be directly attributed to poor resource management that has led directly to excessive soil erosion.

The United States was taught that same lesson fifty years ago. However, this Administration seems to be forgetting our recent past. It is now up to you and this committee, Mr. Chairman, to reaffirm our commitment to proper resource conservation.

Productivity of our cropland is but one reason to support soil conservation efforts. We can now identify soil erosion and sediment movement as a major impediment to achieving our water quality goals.

Nonpoint source pollution (NPS) is now the area of emphasis for water quality specialists. When we look at NPS pollution, we see that proper land treatment is the key to improving water quality and our federal soil conservation programs provide those needed land treatment techniques.

The conservation districts are moving forward to address this problem, but they can not do it alone. Sediment movement does not recognize the political boundaries man has placed on the land. A national program is needed to reach our water quality goals.

That program is already in place out there. The current field office structure of the SCS and the ASCS can provide private landowners with the information needed to control soil erosion. Every state government has a soil conservation agency to provide assistance and direction. Conservation districts are the local link in the program. Being elected officials and local residents provides these officials with an opening to sell soil conservation to their neighbors.

The President's own Council on Environmental Quality calls for increased land treatment efforts in its 15th annual report. That reports points to nonpoint pollution as the major water quality issue of the future. Yet, the budget out of OMB will make gains in this arena impossible.

In addition, we have the 1985 Farm Bill which encourages and even requires greater soil conservation efforts of the producers in federal crop programs. NACD supported those provisions. However, the federal government must help provide the farmer with the tools to be in compliance with the law. Ending soil conservation programs will doubly penalize the landowner. They will not be able to get the technical assistance needed to remain eligible for the farm programs, and then they will no longer receive program benefits. It puts the farmer in a no win situation.

Everyone seems to recognize the need for strong soil conservation programs. However, we must do more than talk about soil conservation -- we must act. That task begins with this committee's actions. NACD urges you to continue in the leadership role you have assumed over the past forty years. We urge you to provide the funding to the SCS and ASCS needed to keep our soil conservation efforts moving forward.

Mr. Chairman, thank you for providing me with this opportunity to present our views.

MONDAY, APRIL 14, 1986.

MINNESOTA FDA LAB

WITNESS

HON. MARTIN O. SABO, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF MINNESOTA

Mr. WHITTEN. We turn now to a colleague and friend from Minnesota, Mr. Martin O. Sabo.

Mr. SABO. Thank you, Mr. Chairman.

Mr. WHITTEN. Martin, we are glad to hear from you and your associates.

Mr. SABO. Mr. Chairman, Mr. Myers, I thank you for this opportunity to appear before you today.

Basically what I want to review with you is a proposal that is floating around the Food and Drug Administration to close the Minneapolis District Food and Drug Laboratory.

As I understand it, the FDA is currently reviewing proposals to consolidate some of its field laboratories. In fact, the Regional FDA Directors are meeting at the end of this month to prepare their final recommendations to the Commission on Laboratory Consolidation. Before any final consolidation is approved, I would like to discuss with you some reasons why the Minneapolis facility should not be closed.

First and foremost in my mind is scientific capability. The Minneapolis Laboratory has been operating since 1908. Its current staff consists of 45 chemists and microbiologists who are dedicated to preserving the safety of our Nation's food and drug supply. This facility houses 25 percent of all the FDA's microbiologists. And it is unique among the laboratories in the country in that the Minneapolis Center for Microbiological Investigation, MCMI, is an integral part of the operation.

MCMI provides unique expertise in many areas of microbiology, and it serves the whole FDA. It was established over 16 years ago.

In the past, the MCMI has responded to the national crisis such as salmonella in milk in Illinois, the listeria problem in Mexican cheese, toxic shock syndrome in tampons, and several others.

The MCMI group, because of its diversity and size, has been able to handle various crises facing the agency effectively and efficiently. The group also has as one of its primary functions the responsibility to run survey type programs. Survey samples require special consideration and space. These jobs place several requirements on a laboratory which cannot be met in a facility heavily burdened with regulatory samples. The progress of conducting microbiological standard surveys also poses special time constraints, transportation needs and laboratory staff size requirements. All of this needs come together in one laboratory for a microbiological standard survey to be valid.

The Minneapolis facility has met these specific requirements because it serves the whole country, not just one region or one district. If this facility is broken up and transferred, it will represent not only a loss to the FDA, but a severe blow to field microbiology as well.

My second concern about the consolidation of the plant relates to the information the FDA is using to base its decision on. The agency proposes to consolidate facilities to save costs and use vacant work stations. One of the reasons stated for closing Minneapolis is that the owner wants FDA out of the building. Actually that is not true. In fact, he recently made a major improvement to the building, and we have correspondence from this agent indicating that he wants a long-term lease with FDA.

This building was built 23 years ago specifically to meet the needs of FDA field operations. And it is in excellent condition.

There are 11 laboratories which FDA says offer the greatest opportunity for consolidation. Minneapolis has the third largest number of employees after New York and Los Angeles, which would be displaced. This represents a substantial cost in closing.

Our local management has estimated that closing this lab will save only $67,000 per year while it will cost over $900,000 to close it. This hardly seems cost-effective to me. Closing, Mr. Chairman and members of the Committee, I would just like to ask that you look very seriously and somewhat skeptically at any proposals this agency makes to consolidate this facility out of business.

I thank you for the opportunity to appear, and will be happy to answer any of your questions.

Mr WHITTEN. Thank you very much. I think you covered it rather thoroughly.

Of course, we all are familiar with the basis on which the administration offers many of these things. I think they are shortsighted in trying to cut the Soil Conservation Service 60 percent. I think most of what we have in the way of cuts in this area is hard to justify in view of the use they are going to make of the funds that they cut. But that is why we have to deal with budgets, as you know. And it is always a pleasure to work with you.

I do not know how we will come out on it, but we do have some adjustments to make. But, personally I agree with your approach.

Mr. SABO. Thank you.

Our judgment is that it will cost money, not save money, to make the consolidation when you start transferring the high paid experts around the country, and very little savings in space.

Thank you very much.

Mr. WHITTEN. Thank you very much.

[The full statement of Congressman Sabo follows:]

STATEMENT ON PROPOSED CLOSING OF MINNEAPOLIS F.D.A. LABORATORY
BEFORE THE
SUBCOMMITTEE ON AGRICULTURE, RURAL DEVELOPMENT AND RELATED AGENCIES
BY

CONGRESSMAN MARTIN OLAV SABO
MONDAY, APRIL 14, 1986

MR. CHAIRMAN, MEMBERS OF THE COMMITTEE, I THANK YOU FOR THE OPPORTUNITY TO APPEAR BEFORE YOU TODAY.

I. INTRODUCTION

BASICALLY, WHAT I WANT TO REVIEW WITH YOU IS A PROPOSAL THAT IS FLOATING AROUND THE FOOD AND DRUG ADMINISTRATION TO CLOSE THE MINNEAPOLIS DISTRICT FOOD AND DRUG LABORATORY. AS I UNDERSTAND IT, THE F.D.A. IS CURRENTLY REVIEWING PROPOSALS TO CONSOLIDATE SOME OF ITS FIELD LABORATORIES. AND IN FACT THE REGIONAL F.D.A. DIRECTORS ARE MEETING AT THE END OF THIS MONTH TO PREPARE THEIR FINAL RECOMMENDATIONS TO THE COMMISSION ON LABORATORY CONSOLIDATION.

BEFORE ANY FINAL CONSOLIDATION IS APPROVED I WOULD LIKE TO DISCUSS WITH YOU SOME REASONS WHY THE MINNEAPOLIS FACILITY SHOULD NOT BE CLOSED DOWN.

II. SCIENTIFIC CAPABILITIES AND UNIQUENESS

FIRST AND FOREMOST IN MY MIND IS SCIENTIFIC CAPABILITY. THE MINNEAPOLIS LABORATORY HAS BEEN OPERATING SINCE 1908. ITS CURRENT STAFF CONSISTS OF 45 CHEMISTS AND MICROBIOLOGISTS WHO ARE DEDICATED TO PRESERVING THE SAFETY OF OUR NATION'S FOOD AND DRUG SUPPLY. THIS FACILITY HOUSES 25% OF ALL THE F.D.A.'S MICROBIOLOGISTS AND IT IS UNIQUE AMONG THE LABORATORIES IN THE COUNTRY IN THAT THE "MINNEAPOLIS CENTER FOR MICROBIOLOGICAL INVESTIGATION" (M.C.M.I.) IS AN INTEGRAL PART OF THE OPERATION. M.C.M.I. PROVIDES UNIQUE EXPERTISE IN MANY AREAS OF MICROBIOLOGY AND IT SERVES THE WHOLE F.D.A. IT WAS ESTABLISHED OVER 16 YEARS AGO.

IN THE PAST M.C.M.I. HAS RESPONDED TO NATIONAL CRISES SUCH AS SALMONELLA IN MILK IN ILLINOIS, THE LISTERIA PROBLEM IN MEXICAN CHEESE, TOXIC SHOCK SYNDROME IN TAMPONS AND SEVERAL OTHERS. THE THE M.C.M.I. GROUP, BECAUSE OF ITS DIVERSITY AND SIZE HAS BEEN ABLE TO HANDLE VARIOUS CRISES FACING THE AGENCY EFFECTIVELY AND EFFICIENTLY.

THIS GROUP ALSO HAS AS ONE OF ITS PRIMARY FUNCTIONS THE RESPONSIBILITY TO RUN SURVEY TYPE PROGRAMS. SURVEY SAMPLES REQUIRE SPECIAL CONSIDERATIONS AND SPACE. THESE JOBS PLACE SPECIAL REQUIREMENTS ON A LABORATORY WHICH CANNOT BE MET IN A FACILITY HEAVILY BURDENED WITH REGULATORY SAMPLES.

THE PROGRESS OF CONDUCTING MICROBIOLOGICAL STANDARDS SURVEYS ALSO POSES SPECIAL TIME CONSTRAINTS, TRANSPORTATION NEEDS AND LABORATORY STAFF SIZE REQUIREMENTS. ALL OF THIS NEEDS TO COME TOGETHER IN ONE LABORATORY FOR A MICROBIOLOGICAL STANDARD SURVEY TO BE VALID. THE MINNEAPOLIS FACILITY HAS MET THESE SPECIFIC REQUIREMENTS BECAUSE IT SERVES THE WHOLE COUNTRY, NOT JUST ONE REGION OR ONE DISTRICT. IF THIS FACILITY IS BROKEN-UP AND TRANSFERRED IT WILL REPRESENT NOT ONLY A LOSS TO THE F.D.A. BUT A SEVERE BLOW TO FIELD MICROBIOLOGY AS WELL.

III. COST EFFICIENCY

MY SECOND CONCERN ABOUT THE CONSOLIDATION OF THE PLANT RELATES TO THE INFORMATION THE F.D.A. IS USING TO BASE ITS DECISION ON. THE AGENCY PROPOSES TO CONSOLIDATE FACILITIES TO SAVE COSTS AND USE VACANT WORK STATIONS. ONE OF THE REASONS STATED FOR CLOSING MINNEAPOLIS IS THAT THE OWNER WANTS F.D.A. OUT OF THE BUILDING. ACTUALLY THAT IS NOT TRUE. IN FACT HE RECENTLY MADE A MAJOR IMPROVEMENT TO THE BUILDING AND WE HAVE CORRESPONDENCE FROM HIS AGENT INDICATING THAT HE WANTS A LONG-TERM LEASE WITH F.D.A. THIS BUILDING WAS BUILT 23 YEARS AGO SPECIFICALLY TO MEET THE NEEDS OF F.D.A. FIELD OPERATIONS AND IT IS IN EXCELLENT CONDITION.

THERE ARE ELEVEN LABORATORIES WHICH F.D.A. SAYS OFFER THE GREATEST OPPORTUNITY FOR CONSOLIDATION. MINNEAPOLIS HAS THE THIRD LARGEST NUMBER OF EMPLOYEES -- AFTER NEW YORK AND LOS ANGELES -- WHICH WOULD BE DISPLACED. THIS REPRESENTS A SUBSTANTIAL COST IN CLOSING. OUR LOCAL MANAGEMENT HAS ESTIMATED THAT CLOSING THIS LAB WILL SAVE ONLY $67,000 PER YEAR WHILE IT WILL COST OVER $900,000 TO CLOSE. THIS HARDLY SEEMS COST-EFFECTIVE TO ME.

IV CONCLUSION

IN CLOSING, MR. CHAIRMAN AND MY FRIENDS ON THE COMMITTEE, I WOULD JUST LIKE TO ASK THAT YOU LOOK VERY SERIOUSLY AND SOMEWHAT SKEPTICALLY AT ANY PROPOSALS THIS AGENCY MAKES TO CONSOLIDATE THIS FACILITY OUT OF BUSINESS.

I THANK YOU FOR YOUR COURTESY AND I'D BE HAPPY TO ANSWER ANY QUESTIONS.

MONDAY, APRIL 14, 1986.

NUTRITIONAL ASSISTANCE IN PUERTO RICO

WITNESS

HON. JAIME B. FUSTER, A REPRESENTATIVE IN CONGRESS FROM THE COMMONWEALTH OF PUERTO RICO

Mr. WHITTEN. We now come to the Honorable Jaime Fuster of Puerto Rico.

Mr. FUSTER. Mr. Chairman, distinguished members of the Subcommittee, I appear before you on behalf of the 3.5 million American citizens who live in Puerto Rico, whom I represent in the United States Congress, to request your support for the budgetary recommendations approved last February by both the House Agriculture Committee and the House Interior and Insular Affairs Committee regarding Nutrition Assistance to Puerto Rico. To put such recommendations in perspective, let me briefly review the history of the Puerto Rico's Nutrition Assistance Program, NAP.

In fiscal 1982, Puerto Rico was taken out of the National Food Stamp Program and granted a special nutritional assistance block grant at a funding level 25 percent below what the Island was receiving then. At that time, Puerto Rico had to remove approximately 100,000 needy families from the Island's assistance rolls in order to adjust to the substantial reduction in funding. Puerto Rico also had to decrease the amount of aid provided to the very needy that remained in the assistance rolls. Thus, while an indigent family of four in the mainland can get maximum monthly benefits of $264, and qualify for assistance even with an income as high as $13,260 a year, an Island family of four only gets a maximum of $199 and it qualifies for no aid if its income exceeds $8,000 a year.

Puerto Rico accepted this huge and unfair reduction in nutrition assistance funds in part because it seemed at that time that the amount of the block grant was minimally fixed and the needy U.S. citizens in Puerto Rico could count on it with certainty.

For five fiscal years after its establishment, from 1982 to 1986, the Puerto Rico Nutrition Assistance Program was not granted any increase for inflation, despite the fact that food costs in Puerto Rico are higher than those in the mainland and despite the fact that such higher food costs grew annually all those years at a rate that was also higher than that of the mainland. As if the substantial reduction in funds ordered in 1981 had not been enough, the Nutrition Assistance Program legislation never provided for the cost of living adjustments' even though such COLAs did exist for the National Food Stamp Program.

Puerto Rico indeed had been treated to a double whammy and, over five years, the accumulated increase in food costs have substantially diminished the buying power of an already substantially reduced Nutrition Assistance Program. If the reduced block grant remains frozen, it will provide 41 percent less for food purchases in fiscal 1987 than what the Puerto Rican needy would have obtained if Puerto Rican participation in the National Food Stamp Program had not been replaced in 1982 with the capped and unadjusted block grant.

This gross inequity was made even more unfair just last December when Congress, at the last hour, enacted P.L. 99-190, imposing a 0.6 percent cut on the NAP block grant, reducing it to $820 million. This has led to an immediate readjustment by which those families receiving an average of $165 a month for their food needs will receive $6.35 less. Needless to say, to families living in extreme penury, such reductions are major hurdles that prevent an adequate nutrition and a standard of living that can assure them some dignity.

In assessing the fairness of our claim, it is necessary to keep in mind that citizens in Puerto Rico still remain the poorest group within the American population. Real family income for all the families in Puerto Rico is only slightly above the United States poverty level. Approximately half of the families participating in the program in 1984 had a total income of $2,000 a year or less.

In spite of the very dire economic circumstances of the Island, Puerto Rico does not participate at all in several major Federal assistance programs, such as General Revenue Sharing and the Supplemental Security Income, and participates only to a limited extent in various important Federal programs for the needy such as AFDC. Medicaid, Medicare, and others.

The bottom line, Mr. Chairman, is that the poor Americans who live in Puerto Rico not only get food assistance that is grossly inadequate to meet their nutritional needs, but that they also suffer discrimination that other poor Americans in the mainland do not experience. In these circumstances, it would really be inexcusable to increase their burden by keeping the Puerto Rico Nutritional Assistance Program frozen.

I urge your Committee to restore the 1986 funding level to what it was in 1985, and to appropriate the funding levels called for and enacted into law with the passage of the Food Security Act of 1985. That Act provides for a modest 3 percent increase in the block grant to partially offset the reductions in buying power suffered by NAP due to inflation.

On behalf of the poorest of the poor in the Nation, I request your support for these petitions that already have the backing of the House Interior and Insular Affairs and the House Agriculture Committees.

Thank you.

Mr. **Whitten**. We realize the problem that you have. And may I say for the record, insofar as what has happened this year, the Office of Budget and Management demanded that the House-Senate conference reduce the appropriations for this on a national scale .6 of one percent.

It was claimed that the bill and the conference report would be vetoed unless it was agreed to. The .6 of 1 percent which, as Chairman, I agreed subject to the approval of the Committee, applied to all items. That was a demand.

As to the determination of what was meant, the Executive Branch has held, as I understand it, that the .6 of 1 percent applies across the board. That is the way it was worded. So I do not know if there is any relief that can be given by this Committee at this time. This is not a supplemental, but it is a hearing for next year's appropriation.

I understand that what they had this year is recommended again for 1987 by the Office of Budget and Management. So I trust you will be treated in line with what you believe. But I say again interpretation of the law is up to the Executive Branch, not to this Committee.

Mr. FUSTER. Yes, sir, Mr Chairman. We are not requesting anything be done about it because we realize at this point of the game, there is really not much that can be done.

But we are requesting that for fiscal 1987, the block grant, the Puerto Rican block grant be kept at its traditional level. And the Administration has recommended that.

Their baseline is the amount that Puerto Rico had received for five years before the .6 of 1 percent cut.

The problem is that the Administration is not recommending the increase, the amount of the increase for the inflation that was signed into law in 1985 with the Social Security Act. So what we are asking is that not only that the level be maintained but that this adjustment for inflation be also honored. I see, in spite on the law already, the Administration, in the President's proposal, is just keeping the block grant at its existing level.

Mr. WHITTEN. I will not repeat what we are up against. We have ceilings and Gramm-Rudman and various other things. But you made a good case and we appreciate your appearance.

Mr. FUSTER. Let me remind the Chairman also that in the Gramm-Rudman legislation, this program is exempted. It is the only Puerto Rican program that is specifically exempted.

Mr. WHITTEN. Well, we have had one or two places where the original amount was complained about. But we are glad to have your appearance here and your statement.

Mr. FUSTER. Thank you, sir.

[Mr. Fuster's full statement follows:]

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RESOURCES

TESTIMONY OF THE HON. JAIME B. FUSTER

BEFORE HOUSE SUB COMMITTEE ON AGRICULTURE RURAL DEVELOPMENT AND RELATED AGENCIES, COMMITTEE ON APPROPRIATIONS

April 14, 1986

Mr. Chairman, distinguished members of the Sub-Committee: I appear before you on behalf of the 3.5 million American citizens who live in Puerto Rico, whom I represent in the U.S. Congress, to request your support for the budgetary recomendations approved last February by both the House Agriculture Committee and by the House Interior and Insular Affairs Committee regarding Nutrition Assistance to P.R. To put such recomendations in perspective, let me briefly review the history of P.R.'s Nutrition Assistance Program (NAP).

In FY 1982 Puerto Rico was taken out of the national Food Stamp Program and was granted a special nutritional assistance block grant at a funding level 25% below what the island was receiving then. At that time, Puerto Rico had to remove approximately 100,000 needy families from the island's assistance rolls in order to adjust to the substantial reduction in funding. Puerto Rico also had to decrease the amount of aid provided to the very needy that remained in the assistance rolls. Thus, while an indigent family of four in the mainland can get maximum monthly benefits of $264, and qualify for assistance even with an income as high as $13,260 a year, an island family of four only gets a maximum of $199 and it qualifies for no aid if its income exceeds $8,000 a year.

Puerto Rico accepted this huge and unfair reduction in nutrition assistance funds in part because it seemed at that time that the amount of the block grant was minimally fixed and the needy U.S. citizens in Puerto Rico could count on it with certainty.

For five fiscal years after its establishment, from 1982-1986, the Puerto Rico Nutrition Assistance Program was not granted any increase for inflation, despite the fact that food costs in Puerto Rico are higher than those in the mainland and despite the fact that such higher food costs grew annually all those years at a rate that was also higher than that of the mainland. As if the substantial reduction in funds ordered in 1981 had not been enough, the NAP legislation never provided for cost of living adjustments, even though such COLA'S did exist for the National Food Stamp Program. Puerto Rico indeed had been treated to a double whammy and over five years the accumulated increase in food costs have substantially diminished the buying power of an already substantially reduced nutrition assistance program. If the reduced block grant remains frozen, it will provide 41% less for food purchases in FY '87 than what the Puerto Rican needy would have obtained if Puerto Rican participation in the National Food Stamp Program had not been replaced in 1982 with the capped and unadjusted block grant.

This gross inequity was made even more unfair just last December when Congress at the last hour enacted P.L. 99-190 imposing a 0.6% cut on the NAP block grant, reducing it to $820.0 million. This has led to an inmediate readjustment by which those families receiving an average of $165 a month for their food needs will receive $6.35 less. Needless to say, to families living in extreme penury, such reductions are major hurdles that prevent an adequate nutrition and a standard of living that can assure them some dignity.

In assessing the fairness of our claim, it is necessary to keep in mind that after an 88-year long legal relationship between the island and the mainland, and despite the substantial economic development, particularly during the 1950's and the 60's, U.S. citizens in Puerto Rico still remain the poorest group within the American population. Per capita personal income is far below mainland levels, amounting to one third of the level for the U.S. generally and to half the level of the poorest of the 50 states. Mean family income for all the families in Puerto Rico is only slightly above the U.S. poverty level. Unemployment in Puerto Rico has remained over 15% since 1975 and has been over 20% since 1982, recently going up as high as 24%. Close to 50%--49% of households and 42.2% of individuals--of the population of the island is currently participating in the food nutrition program. Approximately half of the families participating in the program in 1984 had a total income of $2,000 or less. Economic growth since the early '70's has been nearly null and net out migration from Puerto Rico to the mainland has been growing steadily over the last decade and a half.

In spite of the very dire economic circumstances of the island, Puerto Rico does not participate at all in several major federal assistance programs, such as General Revenue Sharing and the Supplemental Security Income; and participates only to a limited extent in various important federal programs for the needy such as

AFDC, Medicaid, Medicare, and others. These exclusions are particularly unfortunate because those in poverty in the island disproportionately comprise the elderly, children under 18, and single-parent female-headed families.

The bottom line is that the poor Americans who live in Puerto Rico not only get food assistance that is grossly inadequate to meet their nutritional needs but that they also suffer discrimination that other poor Americans in the mainland do not experience. In these circumstances it would really be inexcusable to increase their burden by keeping the Puerto Rico Nutritional Assistance Program (NAP) frozen. I urge your Committee to restore the 1986 funding level to what it was in 1985 and to appropriate the funding levels called for and enacted into law with the passage of the Food Security Act of 1985. That act provides for a modest 3% increase in the block grant to partially offset the reductions in buying power suffered by NAP due to inflation.

On behalf of the poorest of the poor in the Nation, I request your support for these petitions, that already have the backing of the House Interior and Insular Affairs and the House Agriculture Commitees.

MONDAY, APRIL 14, 1986.

TECHNOLOGY TRANSFER

WITNESSES

DELWIN N. SCHNEIDER, EXECUTIVE VICE PRESIDENT, CILCORP VENTURES, INC.

DR. SAMUEL KAPLAN, DIRECTOR OF THE BIOTECHNOLOGY CENTER, UNIVERSITY OF ILLINOIS, DEPARTMENT OF MICROBIOLOGY

Mr. WHITTEN. Next we have Mr. Delwin N. Schneider.

Mr. SCHNEIDER. Thank you very much, Mr. Chairman.

Mr. WHITTEN. If you have a statement, we will be glad for you to have that included in the record. You can touch on the highlights, if you would.

Mr. SCHNEIDER. Yes, sir, I intend to do that. Thank you very much, Chairman Whitten and Mr. Myers.

For the record, I do have a copy of the complete testimony as well as a copy of the grant proposal and the appendix that go with it.

Thank you very much for allowing me to appear before you to request your support of a specialized cooperative agricultural research and development project designed to address agricultural problems through the use of agricultural research.

This project is new in concept. It is both imaginative and responsive to the agricultural needs of our country, both in domestic and international arenas. Geographically, this project will involve the U. S. Department of Agriculture's Northern Regional Research Center, the NRRC, which is located in Peoria, Illinois. However, the project will serve as a model for technology transfer for other Federal laboratories across the Nation.

Problem solving and the development of important technology that will result in creating new and improved products from agricultural research.

At the core of the project will be the formation of an Agricultural Research and Development Company, ARDC, to act as a Center for Cooperative Research and Development by private industry, the NRRC, and the University of Illinois. The focus of this effort will be advanced fermentation research. Fermentation development has broad commercial applications that makes possible a wide range of private industry interests. The NRRC has an established history of successful agricultural technology development, particularly with regard to fermentation research.

ARDC will provide an innovative and pace-setting implementation of the Federal Technology Transfer Act of 1985, which is represented by H.R. 3773. This legislation enables directors of Federal laboratories to enter into cooperative agreements with private companies to facilitate transfer of technology from those labs to the private sector.

ARDC will be a private corporate entity that will plan, administer and carry out technology development programs. It will be created as a subsidiary corporation of CILCORP, Incorporated, a holding company based in Peoria, Illinois. ARDC's other equity owners will be comprised of private corporations who have a common interest in pursuing the commercialization of previously mentioned technologies.

Already a significant cooperative planning effort has involved the representatives of both ARDC, the Northern Region Research Center, and the University of Illinois. Dr. Andrew Cowan, who is the Director of Technology Transfer of the NRRC, and Dr. Samuel Kaplan, the Director of the Biotechnology Center at the University of Illinois, have been key members of the project group. Both have been working with the full support and encouragement of their respective organizations to bring this project to fruition. Their scientific knowledge and expertise, as well as that of their colleagues, has been invaluable in delineating the appropriate scientific objectives. These objectives also have had supportive collaboration from a variety of industry interests. Additionally, cooperative planning to date with the U. S. Department of Agriculture has included discussions that will allow the Northern Regional Research Center to contract available laboratory space at the Center to ARDC to perform its acitivites.

ARDC is a new venture in technology transfer that, in the long run, is designed to stand on its own. Initially, total resources needed include R&D funds of approximately $6 to $8 million per year for the first two years of activities. These funds are sought from a combination of three sources: private company members of ARDC, the Federal Government, and the State of Illinois. Federal support, along with State and private investment, will help to underwrite the initial activities needed to make ARDC self-sufficient. Support in the form of a $2.88 million special research grant is respectfully requested from the Federal Government. ARDC is advised that the State of Illinois also will support this innovative project with a grant of approximately 2 to 3 million. By virtue of the State and Federal commitments, ARDC will be able to leverage these funds and raise private dollars in amounts matching if not exceeding the Federal contribution.

Accompanying me here today, representing one of the major cooperative partners in the ARDC project, is Dr. Samuel Kaplan, who is the Director of the Biotech Center at the University of Illinois. Dr. Kaplan has been concerned for some time that this country was not positioning itself properly to take advantages of the developing industry in biotech technology.

His area involves fermentation research, biomaterials and bioprocessing. Our agricultural surpluses demand new ways of employing these materials through the intervention of microbial, enzymatic or purely chemical means. The question: Can we manufacture new materials such as pharmaceuticals, fibers, nutrients, fuels, or can we improve upon existing methods for the production of current materials? In order to develop such technologies, we must involve agriculturists, biologists, chemists, engineers, materials specialists and computer scientists in the applications of existing as well as new technologies to these important tasks. This effort is of high risk, with accompanying high benefits. And bringing together researchers of such diverse interests is not a simple task and will involve substantial management skills as well as technical expertise.

Therefore, areas involving the exploitation of microbial diversity and microbial activities, subcellular materials and enzymes, immobilization techniques and harvesting technologies. Likewise, the development of biosensors, automation, on-line control, and analysis are but a few of the representative applications of interest.

As an example, in the area of microbial diversity, we have not exploited the gene pool and, therefore, enzymatic potential of the very large number of microbial species known to exist. It is because of these reasons Dr. Kaplan has been interested and involved in the efforts of our ARDC project. With very few exceptions, both the industry and the university alike have been very slow to move in these areas. Without Federal support, it is doubtful that the project will be able to take off and sustain the cost and type of research needed in its early years.

Passage of the Federal Technology Transfer Act of 1985 is imperative also to the success of the project. Without such legislation, the Federal labs and private industries are hard pressed to work together on a cooperative research and development program.

ARDC intends to concentrate its efforts in areas offering promising commercialization opportunities. Through this project, we see a cooperative research effort that draws upon new legislation and new techniques of cooperation between the Federal labs, private industry, and major research institutions of higher learning, such as the University of Illinois.

ARDC, we really believe, is a project whose time indeed is needed and is coming.

Thank you very much.

Mr. WHITTEN. Thank you very much, Mr. Schneider.

Our colleague, Bob Michel, has kept this Subcommittee aware of Peoria for a long time. He was ranking member on this Subcommittee for a number of years and continues his interest. So we who are on this Subcommittee are also familiar with the fine work that is done.

Within the limits that you know we have here, we hope to do the best we can to keep things at this year's level, across the board. In view of what the Congress has imposed on itself, I do not know how successful we will be.

Some years ago, we had a request for a quarter of a million dollars to do research at Peoria on fuels under extremely cold conditions. That is when we thought Russia might move into Alaska somewhere. I had been to Eglin Field, Florida, where the military has a cold weather facility for fuel which is as big as three football fields. So I asked the Department why they did not use Eglin Field, or why they did not use the facility right across the river at Fort Belvoir? It is much closer to them.

So we have a long background with Peoria, and we are very fond of Bob Michel, and we will see what we can do. But we do have the overall problems that I mentioned earlier.

Thank you for your appearance.

Mr. SCHNEIDER. I understand, and thank you for your courtesy.

[Mr. Schneider's full statement follows:]

TESTIMONY BEFORE THE COMMITTEE ON APPROPRIATIONS-- SUBCOMMITTEE ON AGRICULTURE, RURAL DEVELOPMENT, AND RELATED AGENCIES

DELWIN N. SCHNEIDER
EXECUTIVE VICE PRESIDENT
CILCORP Ventures Inc.
300 Liberty Street
Peoria, Illinois 61602
April 14, 1986

THANK YOU VERY MUCH FOR ALLOWING ME TO APPEAR BEFORE YOU TO REQUEST YOUR SUPPORT OF A SPECIALIZED COOPERATIVE AGRICULTURAL RESEARCH AND DEVELOPMENT PROJECT DESIGNED TO ADDRESS AGRICULTURAL PROBLEMS THROUGH THE USE OF AGRICULTURAL RESEARCH.

THE PROJECT FOCUS IS COOPERATIVE RESEARCH AND DEVELOPMENT THAT COMBINES THE INITIATIVE OF PRIVATE ENTERPRISE AND THE INSIGHT OF LEADING SCIENTISTS TO CREATE NEW PRODUCTS AND OPEN NEW MARKETS THROUGH TECHNOLOGIES DEVELOPED IN AMERICA'S AGRICULTURAL LABORATORIES.

THIS PROJECT IS NEW IN CONCEPT. IT IS BOTH IMAGINATIVE AND RESPONSIVE TO AGRICULTURAL NEEDS OF OUR COUNTRY BOTH IN DOMESTIC AND INTERNATIONAL ARENAS. GEOGRAPHICALLY, THIS PROJECT WILL INVOLVE THE U.S. DEPARTMENT OF AGRICULTURE'S NORTHERN REGIONAL RESEARCH CENTER (NRRC) LOCATED IN PEORIA, ILLINOIS. HOWEVER, THE PROJECT WILL SERVE AS A MODEL FOR TECHNOLOGY TRANSFER FROM NOT ONLY THE OTHER FEDERAL AGRICULTURAL LABORATORIES BUT FROM OTHER FEDERAL LABORATORIES ALL ACROSS THE NATION.

ANOTHER POSITIVE DIMENSION OF THE PROJECT IS THAT IT WILL BRING TOGETHER ON A COOPERATIVE BASIS LOCAL GOVERNMENT, PRIVATE INDUSTRY, THE FEDERAL GOVERNMENT, THE UNIVERSITY OF ILLINOIS, AND THE STATE OF ILLINOIS. ACHIEVING THIS COOPERATIVE EFFORT ENABLES A BROAD BASE OF RESOURCES TO BE DIRECTED TOWARD

PROBLEM SOLVING AND THE DEVELOPMENT OF IMPORTANT TECHNOLOGY THAT WILL RESULT IN CREATING NEW AND IMPROVED PRODUCTS FROM AGRICULTURAL RESOURCES.

AT THE CORE OF THE PROJECT WILL BE THE FORMATION OF AN AGRICULTURAL RESEARCH AND DEVELOPMENT COMPANY (ARDC) TO ACT AS A CENTER FOR COOPERATIVE RESEARCH AND DEVELOPMENT BY PRIVATE INDUSTRY, THE NRRC, AND THE UNIVERSITY OF ILLINOIS. THE FOCUS OF THIS EFFORT WILL BE ADVANCED FERMENTATION RESEARCH AND DEVELOPMENT. FERMENTATION DEVELOPMENT HAS BROUGHT COMMERCIAL APPLICATION IN AREAS OF FOODS, BEVERAGES, CHEMICALS, PHARMACEUTICALS, AND OTHER AGRICULTURAL PRODUCTS. SUCH BROAD MARKET APPLICATIONS MAKE POSSIBLE A WIDE RANGE OF PRIVATE INDUSTRY INTEREST. THE NORTHERN REGIONAL RESEARCH CENTER HAS AN ESTABLISHED HISTORY OF SUCCESSFUL AGRICULTURAL TECHNOLOGY DEVELOPMENT PARTICULARLY WITH REGARD TO SUCH FERMENTATION RESEARCH.

ARDC WILL PROVIDE AN INNOVATIVE AND PACE-SETTING IMPLEMENTATION OF THE "FEDERAL TECHNOLOGY TRANSFER ACT OF 1985" (HR3773) WHICH PASSED THE U.S. HOUSE OF REPRESENTATIVES BY A VOTE OF 386-0 AND IS CURRENTLY RECEIVING SIMILAR LEGISLATIVE SUPPORT IN THE SENATE COMMERCE, SCIENCE & TRANSPORTATION COMMITTEE. THIS LEGISLATION WILL ENABLE DIRECTORS OF THE FEDERAL LABORATORIES TO ENTER INTO COOPERATIVE AGREEMENTS WITH PRIVATE COMPANIES TO FACILITATE TRANSFER OF TECHNOLOGY FROM THOSE LABORATORIES TO THE PRIVATE SECTOR THUS CREATING A FOUNDATION TO ACHIEVE COMMERCIALIZATION OF FEDERAL TECHNOLOGY. SUCH COMMERCIALIZATION BRINGS TO THE MARKET AS EXPANDED USE OF AGRICULTURAL GOODS AND PRODUCTS.

ARDC WILL BE AS A PRIVATE CORPORATE ENTITY. ARDC WILL PLAN, ADMINISTER, AND CARRY OUT TECHNOLOGY DEVELOPMENT PROGRAMS. IT WILL BE CREATED AS A SUBSIDIARY

CORPORATION OF CILCORP INC., A HOLDING COMPANY BASED IN PEORIA, ILLINOIS, DEDICATED TO EXPANSION, DEVELOPMENT, AND STRENGTHENING OF THE ECONOMIC BASE THROUGH THE COMBINED AND COOPERATIVE USE OF THE AREA'S RESOURCES. ARDC'S EQUITY OWNERSHIP WILL BE COMPRISED OF PRIVATE CORPORATIONS WHO HAVE A COMMON INTEREST IN PURSUING THE COMMERCIALIZATION OF PREVIOUSLY-MENTIONED TECHNOLOGIES. ALL SUCH COMPANIES WILL ALSO BE DEDICATED TO USING AGRICULTURAL RESEARCH TO SOLVE AGRICULTURE PROBLEMS.

ARDC WILL ALSO WORK ON A COOPERATIVE BASIS WITH NRRC, THE UNIVERSITY OF ILLINOIS, AND OTHER FEDERAL LABORATORIES. COOPERATIVE ACTIVITIES BETWEEN ARDC AND THE NRRC (AS WELL AS OTHER FEDERAL LABORATORIES) WILL BE ENUMERATED THROUGH COOPERATIVE AGREEMENTS WITH THE APPROPRIATE FEDERAL AGENCIES.

ALREADY, A SIGNIFICANT COOPERATIVE PLANNING EFFORT INVOLVING REPRESENTATIVES OF ARDC, THE NRRC, AND THE UNIVERSITY OF ILLINOIS HAS LED TO THE CREATION AND POSSIBILITIES OF THIS INNOVATIVE PROGRAM. DR. ANDREW COWAN (DIRECTOR OF TECHNOLOGY TRANSFER) OF THE NRRC AND DR. SAMUEL KAPLAN (DIRECTOR OF THE BIOTECHNOLOGY CENTER) OF THE UNIVERSITY OF ILLINOIS HAVE BEEN KEY MEMBERS OF THE PROJECT GROUP. BOTH HAVE BEEN WORKING WITH THE SUPPORT AND ENCOURAGEMENT OF THEIR RESPECTIVE ORGANIZATIONS TO BRING THIS UNIQUE PROJECT TO FRUITION. THEIR SCIENTIFIC KNOWLEDGE AND EXPERTISE AS WELL AS THAT OF THEIR COLLEAGUES HAS BEEN INVALUABLE IN DELINEATING APPROPRIATE SCIENTIFIC OBJECTIVES. THESE OBJECTIVES ALSO HAVE HAD SUPPORTIVE COLLABORATION FROM A VARIETY OF INDUSTRY INTERESTS. ADDITIONALLY, COOPERATIVE PLANNING TO DATE WITH THE U.S. DEPARTMENT OF AGRICULTURE HAS INCLUDED DISCUSSIONS THAT SUGGEST THE NORTHERN REGIONAL RESEARCH CENTER WILL CONTRACT AVAILABLE LABORATORY SPACE AT THE CENTER TO ARDC TO PERFORM IT ACTIVITIES.

ARDC'S BOARD OF DIRECTORS WILL BE MADE UP OF CORPORATE REPRESENTATIVES FROM ITS EQUITY MEMBERS. THESE MEMBERS FOR THE MOST PART WILL HAVE A SUBSTANTIAL SCIENTIFIC BACKGROUND AND WILL BE EXECUTIVE LEVEL PEOPLE FROM WITHIN THE STRATEGIC RESEARCH AND DEVELOPMENT AREAS OF THE COMPANIES. ONE OF THE KEY RESPONSIBILITIES OF THE BOARD OF DIRECTORS WILL BE GUIDANCE AND OVERVIEW OF THE SCIENTIFIC PROJECTS WITHIN ARDC. THEIR PLANNING EFFORTS WILL BE ASSISTED THROUGH A CLOSE WORKING RELATIONSHIP WITH NRRC AND THE UNIVERSITY OF ILLINOIS. A STRONG TECHNOLOGY DEVELOPMENT COMMITTEE WILL BE PUT IN PLACE THAT WILL BE CENTRAL TO THE ARDC SCIENTIFIC MISSIONS. THIS COMMITTEE WILL INCLUDE BOARD MEMBERS, ARDC EMPLOYEES INCLUDING SCIENTISTS AND PROJECT PERSONNEL, COOPERATIVE ENTITIES SUCH AS THE UNIVERSITY OF ILLINOIS AND THE NRRC AND OTHER SPECIALIZED INDIVIDUALS THAT OFFER PARTICULAR SCIENTIFIC EXPERTISE AND VALUE.

ARDC IS A DYNAMICALLY NEW VENTURE IN TECHNOLOGY TRANSFER THAT IN THE LONG RUN IS DESIGNED TO STAND ON ITS OWN FEET THREE YEARS OUT. AS THE CREATION OF MARKETABLE TECHNOLOGIES AND MATERIALS HAVE A POSITIVE IMPACT ON THE AGRICULTURAL INDUSTRY THROUGH EXPANDED AND NEW USE OF FARM PROJECTS, ARDC WILL BECOME AN INDEPENDENT ENTITY. IT MUST, THEREFORE, CONVINCE ITS MEMBERS AND CONTRIBUTORS THAT ARDC WILL BE A SUBSTANTIALLY SUCCESSFUL PROJECT AND WORTHY OF PRIVATE ENTERPRISE SUPPORT.

INITIALLY, TOTAL RESOURCES NEEDED INCLUDE RESEARCH AND DEVELOPMENT FUNDS OF APPROXIMATELY $6 MILLION TO $8 MILLION PER YEAR FOR THE FIRST TWO YEARS OF ACTIVITIES. THESE FUNDS ARE SOUGHT FROM A COMBINATION OF THREE SOURCES: PRIVATE COMPANY MEMBERS OF ARDC, THE FEDERAL GOVERNMENT, AND THE STATE OF ILLINOIS. PRESENTATIONS TO PRIVATE COMPANIES INDICATE A STRONG WILLINGNESS TO INVEST IN COOPERATIVE AGRICULTURAL TECHNOLOGY TRANSFER RESEARCH

AND DEVELOPMENT. FEDERAL SUPPORT ALONG WITH STATE AND PRIVATE INVESTMENT WILL HELP TO UNDERWRITE THE INITIAL ACTIVITIES NEEDED TO MAKE ARDC SELF-SUFFICIENT. SUPPORT IN THE FORM OF A $2.88 MILLION SPECIAL RESEARCH GRANT IS REQUIRED AND RESPECTFULLY REQUESTED FROM THE FEDERAL GOVERNMENT. ARDC IS ADVISED THAT THE STATE OF ILLINOIS, TOO, WILL SUPPORT THIS INNOVATIVE PROJECT WITH A GRANT OF APPROXIMATELY $2 MILLION TO $3 MILLION. BY VIRTUE OF THE FEDERAL AND STATE COMMITMENTS, ARDC WILL BE ABLE TO LEVERAGE THESE FUNDS AND RAISE PRIVATE DOLLARS IN AMOUNTS MATCHING IF NOT EXCEEDING THE FEDERAL CONTRIBUTION.

INCLUDED AS A PART OF MY REMARKS AND ACCOMPANYING ME HERE TODAY REPRESENTING ONE OF THE MAJOR COOPERATIVE PARTNERS IN THE ARDC PROJECT IS DR. SAMUEL KAPLAN, DIRECTOR OF THE BIOTECH CENTER AT THE UNIVERSITY OF ILLINOIS. AS PREVIOUSLY MENTIONED IN THIS TESTIMONY, DR. KAPLAN ALONG WITH DR. COWAN FROM THE NORTHERN REGIONAL RESEARCH CENTER HAVE GIVEN MANY HOURS OF HELP TOWARD THIS PROJECT PARTICULARLY IN THE SCIENTIFIC ARENA. DR. KAPLAN HAS PREPARED SUPPLEMENTAL INFORMATION RELATIVE TO THE TECHNOLOGIES ASSOCIATED WITH THIS PROJECT. I WOULD LIKE DR. KAPLAN TO MAKE AVAILABLE TO YOU THIS INFORMATION TO BE INCLUDED IN THE TESTIMONY HERE TODAY.

DR. KAPLAN'S TESTIMONY

I WOULD LIKE TO THANK THE COMMITTEE FOR PERMITTING ME THE OPPORTUNITY TO PROVIDE THE FOLLOWING INFORMATION.

MY NAME IS SAMUEL KAPLAN AND I AM A PROFESSOR OF MICROBIOLOGY AT THE UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN. I AM ALSO DIRECTOR OF THE SCHOOL OF LIFE

SCIENCES ON CAMPUS, AS WELL AS DIRECTOR OF THE BIOTECHNOLOGY CENTER. IT IS IN THIS LATTER CAPACITY THAT I APPEAR HERE TODAY.

MY INTERACTIONS WITH THE PEORIA DEVELOPMENT GROUP, THROUGH DEL SCHNEIDER, AND ARDC BEGAN OVER A YEAR AGO. ALTHOUGH MY ROLE HAS BEEN CONSULTATIVE IN NATURE, I HAVE DONATED MY TIME BECAUSE I FEEL POSITIVELY ABOUT THE ACTIVITIES BEING PROPOSED.

I HAVE BEEN CONCERNED, FOR THE PAST 8-10 YEARS, THAT IN ONE MAJOR AREA THIS COUNTRY WAS NOT POSITIONING ITSELF PROPERLY TO TAKE ADVANTAGE OF THE DEVELOPING INDUSTRY IN BIOTECHNOLOGY. THIS AREA INVOLVES: FERMENTATION RESEARCH, BIOMATERIALS AND BIOPROCESSING. OUR AGRICULTURAL SURPLUSES DEMAND NEW WAYS OF EMPLOYING THESE MATERIALS THROUGH THE INTERVENTION OF MICROBIAL, ENZYMATIC OR PURELY CHEMICAL MEANS. CAN WE MANUFACTURE NEW MATERIALS, E.G., PHARMACEUTICALS, FIBERS, NUTRIENTS, FUELS, OR CAN WE IMPROVE UPON EXISTING METHODS FOR THE PRODUCTION OF CURRENT MATERIALS? IN ORDER TO DEVELOP SUCH TECHNOLOGIES, WE MUST INVOLVE AGRICULTURALISTS, BIOLOGISTS, CHEMISTS, ENGINEERS, MATERIALS SPECIALISTS AND COMPUTER SCIENTISTS IN THE APPLICATIONS OF EXISTING AS WELL AS NEW TECHNOLOGIES TO THESE IMPORTANT TASKS. THE EFFORT IS OF HIGH RISK, WITH ACCOMPANYING HIGH BENEFITS. BRINGING TOGETHER RESEARCHERS OF SUCH DIVERSE INTERESTS IS NOT A SIMPLE TASK AND WILL INVOLVE SUBSTANTIAL MANAGEMENT SKILLS AS WELL AS TECHNICAL EXPERTISE.

THEREFORE, AREAS OF INTEREST INVOLVE THE EXPLOITATION OF MICROBIAL DIVERSITY AND MICROBIAL ACTIVITIES, SUBCELLULAR MATERIALS AND ENZYMES, IMMOBILIZATION TECHNIQUES AND HARVESTING TECHNOLOGIES. LIKEWISE, THE DEVELOPMENT OF BIOSENSORS, AUTOMATION, ON-LINE CONTROL AND ANALYSIS ARE BUT A

FEW OF THE REPRESENTATIVE APPLICATIONS OF INTEREST. FOR EXAMPLE, IN THE AREA OF MICROBIAL DIVERSITY, WE HAVE NOT EXPLOITED THE GENE POOL AND, THEREFORE, ENZYMATIC POTENTIAL OF THE VERY LARGE NUMBER OF MICROBIAL SPECIES KNOWN TO EXIST. ORGANISMS ABLE TO GROW UNDER ANAEROBIC CONDITIONS, UNDER EXTREME CONDITIONS OF COLD AND TEMPERATURE, PH, SALINITY, OSMOTIC PRESSURE, CAN BE EXPLOITED NOT ONLY BECAUSE OF THEIR PHYSIOLOGICAL ACTIVITIES BUT, ALSO, BECAUSE THEY MAY FACILITATE PRODUCT ISOLATION, SEPARATION PROTOCOLS OR ON-LINE MONITORING. THE EXAMPLES ARE MANYFOLD.

IT IS BECAUSE OF THESE REASONS THAT I HAVE BEEN INTERESTED IN THE ENLIGHTENED EFFORTS OF THE PEORIA GROUP. WITH VERY FEW EXCEPTIONS, BOTH INDUSTRY AND UNIVERSITY ALIKE HAVE BEEN VERY SLOW TO MOVE IN THESE AREAS.

I WOULD BE HAPPY TO ANSWER ANY QUESTIONS.

SUMMARY

THE ARDC PROJECT IS AN ACTION-ORIENTED CONCEPT AND PROPOSAL GEARED TO AGRICULTURAL PROBLEM SOLVING. ITS BASE OF SUPPORT EXTENDS BEYOND THE REQUEST OF THE FEDERAL GOVERNMENT. IT IS A TRUE APPLICATION OF BROAD-BASED SUPPORT AND LEVERAGING OF DOLLARS FOR AGRICULTURAL RESEARCH AND DEVELOPMENT. THE REQUESTED FEDERAL DOLLARS NOT ONLY WILL LEVERAGE FURTHER THE STATE AND PRIVATE PARTICIPATION, BUT WILL ALSO HELP TO ATTRACT EVEN MORE PRIVATE DOLLARS THUS STRENGTHENING THE OVERALL RESEARCH AND DEVELOPMENT EFFORT AND WILL LEAD IT TOWARDS SELF-SUFFICIENCY. WITHOUT FEDERAL SUPPORT, IT IS DOUBTFUL THE PROJECT WILL BE ABLE TO TAKE OFF AND SUSTAIN THE COST AND TYPE OF RESEARCH NEEDED TO SPIN COMMERCIALIZATION OF SUCH AGRICULTURAL PRODUCTS INTO THE PRIVATE MARKETPLACE.

PASSAGE OF THE FEDERAL TECHNOLOGY TRANSFER ACT OF 1985 IS IMPERATIVE ALSO TO THE SUCCESS OF THIS PROJECT. WITHOUT SUCH LEGISLATION, FEDERAL LABORATORIES AND PRIVATE INDUSTRY ARE HARD PRESSED TO WORK TOGETHER ON COOPERATIVE RESEARCH AND DEVELOPMENT PROGRAMS. ARDC INTENDS TO CONCENTRATE ITS R&D EFFORTS IN AREAS OFFERING PROMISING COMMERCIALIZATION OPPORTUNITIES. THE JAPANESE ALREADY HAVE TARGETED AS A SCIENTIFIC AREA FOR COMPETITION THE NEW BIOTECHNOLOGIES APPLIED TO FERMENTATION. THE JAPANESE HAVE BEEN MORE AGGRESSIVE IN BRINGING PRODUCTS TO THE MARKETPLACE IN THE FERMENTATION INDUSTRY THAN MANY OF OUR COUNTERPARTS WORLDWIDE INCLUDING THE UNITED STATES. THE OPPORTUNITY, THEREFORE, CLEARLY EXISTS FOR THE JAPANESE TO LEAP AHEAD OF THE U.S. AND CAPTURE THE MARKETPLACE FOR COMMERCIALIZATION OF BIOTECHNOLOGY AS APPLIED TO FERMENTATION. A RECENT REPORT TO CONGRESS ENTITLED, COMMERCIAL BIOTECHNOLOGY AND INTERNATIONAL ANALYSIS, IS CONSIDERED THE MOST COMPREHENSIVE REPORT EVER MADE ON THE NEW BIOTECHNOLOGY AND THE GROWING INTERNATIONAL COMPETITION IN ITS PRODUCTS. THE REPORT INDICATES THE U.S. IS IN DANGER OF BEING OVERTAKEN BY JAPAN AS THE WORLD LEADER IN THE COMMERCIAL APPLICATIONS OF GENE SPLICING RESEARCH. THE REPORT CALLS THE NEW BIOTECHNOLOGY IS BASED ON GENE SPLICING AND OTHER NEW RESEARCH TECHNIQUES. THE FIELD HAS POTENTIAL FOR THE DEVELOPMENT OF NEW DRUGS AND FOODS AND OTHER MEDICAL AGRICULTURE AND CHEMICAL PRODUCTS AND THE MEANS FOR DISPOSAL OF TOXIC WASTES. THE REPORT INDICATES THE U.S. LEADS IN THE BASIC BIOLOGICAL RESEARCH THAT HAS MADE THE NEW TECHNOLOGY POSSIBLE, BUT THE REPORT SAID A LOW LEVEL OF FEDERAL SUPPORT FOR APPLIED RESEARCH MAY CAUSE A BOTTLENECK IN THIS COUNTRY'S COMMERCIALIZATION EFFORT.

TODAY JAPAN LEADS THE WORLD IN THE MICROBIAL PRODUCTION OF AMINO ACIDS WIDELY USED IN AGRICULTURE AND THE FOOD INDUSTRY AND OTHER ASPECTS OF BIOPROCESSING. JAPANESE INDUSTRY IS MAKING A STRONG BID FOR LEADERSHIP IN THE PRODUCTION OF

MEDICINAL DRUGS. THE UNITED STATES IS LACKING IN THE FINANCING AND CREATION OF GAP DEVELOPMENT THAT IS THE DEVELOPMENT AND TECHNOLOGY DEVELOPMENT ACTIVITIES BETWEEN THE IDEA AND COMMERCIALIZATION. IT IS THIS AREA THAT ARDC THROUGH A COOPERATIVE EFFORT CAN BE MOST VALUABLE.

DR. ARTHUR HUMPHREY, LEADING CHEMICAL ENGINEER AT LEHIGH UNIVERSITY, HAS SAID WE ARE AT WAR, AN ECONOMIC WAR IN WHICH THE VERY SURVIVAL OF THE AMERICAN STANDARD OF LIVING AND THE WAY OF LIFE ARE AT STAKE. THE WAR IS BEING WAGED ON THE BATTLE FIELDS OF HIGH TECHNOLOGY COMMERCIALIZATION. THE STAKES IN THIS BATTLE ARE HIGH. I DOUBT THAT ANYONE CAN FULLY COMPREHEND ALL OF THE FUTURE OPPORTUNITIES AFFORDED BY THE "NEW BIOLOGY". IN A RECENT ARTICLE BY CHRISTOPHER EDWARDS WITH JOHN ELKINGTON AND ALLISON MURRAY PUBLISHED IN THE BIOTECHNOLOGY, APRIL 1984, IT IS SAID THE JAPANESE PEOPLE HAVE LONG BEEN NOTED FOR THEIR ABILITY TO ASSIMILATE FEATURES OF OTHER CULTURES TO SUPPORT THEIR ISLAND OF EXISTENCE. BIOTECHNOLOGY IS NO EXCEPTION. BUILDING UPON A GREAT ANCIENT TRADITION IN FERMENTATION IN THE CAPACITY OF THE JAPANESE PEOPLE TO FORM EXTREMELY STRONG GROUP BONDS IN THE FACTORY, THE UNIVERSITIES, THE JAPANESE R&D COMMUNITY HAS ESTABLISHED A CRITICAL MASS TO EXPLOIT BIOTECHNOLOGY. WHILE THE MAJOR RESEARCH POWERS IN JAPAN FEVERISHLY IMPORT BASIC TECHNIQUES FROM THE FINEST LABORATORIES IN THE WORLD, THERE IS A GROWING AWARENESS OF THE NEED FOR THE NATION TO PRODUCE TRULY INNOVATIVE RESEARCH. THE RACE WITHIN JAPAN FOR THE NEW PHARMACEUTICAL MARKETS, THE TRANSFORMATION OF FOOD-RELATED RESEARCH COMPANIES IN THE PHARMACEUTICAL AND DIAGNOSTIC MANUFACTURERS, AND THE CONTINUING PUSH BY THE JAPANESE GOVERNMENT FOR RESEARCH COLLABORATION FORESHADOW THE DAY WHEN JAPAN MAY COMPETE FIERCELY WITH THE U.S. FOR DOMINANCE IN BIOTECHNOLOGY. ARDC IS A NEW AND INNOVATIVE APPROACH TO MAINTAINING THE COMPETITIVE EDGE ESTABLISHED IN THE UNITED STATES IN THE AREAS OF BIOTECHNOLOGY. IT IS FOR THE FIRST TIME A COOPERATIVE RESEARCH EFFORT THAT DRAWS UPON NEW LEGISLATION AND NEW TECHNIQUES OF COOPERATION BETWEEN A FEDERAL LABORATORY, PRIVATE INDUSTRY, AND A MAJOR RESEARCH INSTITUTION OF HIGHER LEARNING. INDEED, ARDC IS A PROJECT WHOSE TIME INDEED IS COMING.

MONDAY, APRIL 14, 1986.

APPROPRIATE TECHNOLOGY FOR RURAL AREAS

WITNESSES

HON. ED JONES, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF TENNESSEE

PEGGY WHEELER, PUBLIC AFFAIRS DIRECTOR, NATIONAL CENTER FOR APPROPRIATE TECHNOLOGY

Mr. WHITTEN. I recognize the outstanding member of the Agriculture Committee, my good friend and colleague, Ed Jones. We will be glad to hear from you Mr. Jones.

Mr. JONES. Thank you very much, Mr. Chairman and members of the Committee. I appreciate more than you know the fact that you are having these hearings, and thank you very much for allowing me to appear.

I am going to be brief to the point, and I think that without a doubt I can associate with everything that Peggy Wheeler said. Because I know the nature of which she is working also.

But before I proceed with my statement regarding the need for appropriate technology for our rural areas, commonly known as ATTRA, I want to thank you, Mr. Chairman, for your recent actions regarding the implementation of the Conservation Reserve. I cannot pass up the opportunity to thank you for that.

You spent your career in the House as probably the single most strong supporter of the Soil Conservation programs. I have been proud to have worked with you and to have followed your lead on the subject since I came to Congress.

The Conservation Reserve is a much needed addition to our arsenal of weapons against soil erosion. It is in no way the entire answer, and I simply cannot substitute for our existing programs anything that has not been done already.

The reserve was not conceived as a substitute or designed to be a replacement for our other programs.

Mr. WHITTEN. May I interrupt to say that I realize that was the attitude of the Committee. As you know, I voted for it as an addition to existing programs, as I know all you did. But, where they come down and take advantage of it, and want to cut the Soil Conservation 60 percent and let 3,700 people go now, with a notice that it was over, goes too far. So I appreciate your statement there. And I say for the record that was never the intent of your Committee, and we know that, and we are glad it worked out.

Mr. JONES. Well, I appreciate very much what you have said. And I am absolutely aware of that fact and know that that was the concept that you had in the beginning. And I am proud that all the confusion, if there was some, has been cleared up. And I do expect the program to proceed efficiently and successfully.

I, too, was greatly concerned about the loss of many of the people that had to do the technology of soil conservation and the programs that related to that. And I hope for our given fact that we are going to be able to clear that up without any problem whatsoever.

Mr. Chairman and members of the Committee, you have before you a funding request for the establishment of a center to promote the transfer of appropriate technology to rural areas. This center in the most simple terms will be able to keep track of all the new ways being developed for farmers to become more efficient and make that practical information available to farmers and others over the phone and through written material.

Many of you have seen the recent report by the Congressional Office of Technology Assessment. It shows that agriculture is entering a new era of even faster technological change.

As an illustration, by the year 2000, cotton production per acre will increase over 15 percent, soybean production per acre will gain over 3 percent, wheat production per acre will increase 5 percent, and milk production per cow will double.

My concern is that large rich farms will be able to purchase the latest technology and scientific advice on a routine basis. And if we do not establish something like ATTRA, small farmers, like many of those in my area and in many of your areas, will be left in the dust.

Such an information service will tell small farmers how to become more efficient, how to reduce their cost of production, and how to make wise use of natural resources.

The Extension Service, the Land Grant Colleges and agencies like the Tennessee Valley Authority will be both participants in designing the program as well as beneficiaries of the shared information and data base.

County Agents, I imagine, would become the primary users of the center as they face an even increasing demand for technological information today.

Mr. Chairman and members of the Committee, I realize the pressure on you and this Committee regarding funding. I believe the small amount spent on this project would save small farmers many times that amount. All I ask is that you give this request thoughtful consideration.

And I do thank you very much.

Mr. **Whitten**. Thank you very much. We appreciate your appearance here and well said.

Mr. **Jones**. Thank you.

[The full statement of Congressman Jones follows:]

TESTIMONY OF

HONORABLE ED JONES, CHAIRMAN

SUBCOMMITTEE ON CONSERVATION, CREDIT, AND RURAL DEVELOPEMNT

BEFORE THE

COMMITTEE ON APPROPRIATIONS

SUBCOMMITTEE ON AGRICULTURE, RURAL DEVELOPMENT

AND RELATED AGENCIES

APRIL 14, 1986

Thank you, Mr. Chairman, for having these hearings and allowing me to appear.

Before I proceed with my statement regarding the need for Appropriate Technology Transfer for Rural Areas (ATTRA), I want to thank Chairman Whitten for his recent actions regarding the implementation of the Conservation Reserve.

Mr. Chairman, you have spent your career in the House as probably the single strongest supporter of soil conservation programs. I have been proud to have worked with you and to have followed your lead on the subject since I came to Congress.

The Conservation Reserve is a much needed addition to our arsenal of weapons against soil erosion. It is in no way the entire answer and it

SIMPLY CANNOT SUBSTITUTE FOR OUR EXISTING PROGRAMS. THE RESERVE WAS NOT CONCEIVED AS A SUBSTITUTE OR DESIGNED TO BE A REPLACEMENT OF OTHER PROGRAMS. I PERSONALLY APPRECIATE YOUR CONCERN OVER BOTH THE FUNDING MECHANISM AND THE ADMINISTRATION'S VIEW OF THE RESERVE AS A REPLACEMENT FOR OTHER PROGRAMS.

NOW THAT THE CONFUSION HAS BEEN CLEARED UP, I EXPECT THE PROGRAM TO PROCEED EFFICIENTLY AND SUCCESSFULLY.

MR. CHAIRMAN AND MEMBERS OF THE COMMITTEE, YOU HAVE BEFORE YOU A FUNDING REQUEST FOR THE ESTABLISHMENT OF A CENTER TO PROMOTE THE TRANSFER OF APPROPRIATE TECHNOLOGY TO RURAL AREAS.

THIS CENTER IN THE MOST SIMPLE TERMS WILL BE ABLE TO KEEP TRACK OF ALL THE NEW WAYS BEING DEVELOPED FOR FARMERS TO BECOME MORE EFFICIENT AND MAKE THAT PRACTICAL INFORMATION AVAILABLE TO FARMERS AND OTHERS OVER THE PHONE AND THROUGH WRITTEN MATERIAL.

MANY OF YOU HAVE SEEN THE RECENT REPORT BY THE CONGRESSIONAL OFFICE OF TECHNOLOGY ASSESSMENT. IT SHOWS THAT AGRICULTURE IS ENTERING A NEW ERA OF EVEN FASTER TECHNOLOGICAL CHANGE.

BY THE YEAR 2000 COTTON PRODUCTION PER ACRE WILL INCREASE OVER 15 PERCENT, SOYBEAN PRODUCTION PER ACRE WILL GAIN OVER 23 PERCENT, WHEAT PRODUCTION

PER ACRE WILL INCREASE 25 PERCENT, AND MILK PRODUCTION PER COW WILL DOUBLE.

MY CONCERN IS THAT LARGE RICH FARMS WILL BE ABLE TO PURCHASE THE LATEST TECHNOLOGY AND SCIENTIFIC ADVICE ON A ROUTINE BASIS AND IF WE DON'T ESTABLISH SOMETHING LIKE ATTRA, SMALL FARMERS LIKE MANY OF THOSE IN MY AREA WILL BE LEFT IN THE DUST.

SUCH AN INFORMATION SERVICE WILL TELL SMALL FARMERS HOW TO BECOME MORE EFFICIENT, HOW TO REDUCE THEIR COST OF PRODUCTION, AND HOW TO MAKE WISE USE OF NATURAL RESOURCES.

THE EXTENSION SERVICE, THE LAND GRANT COLLEGES AND AGENCIES LIKE THE TENNESSEE VALLEY AUTHORITY

WILL BE BOTH PARTICIPANTS IN DESIGNING AND RUNNING THE PROGRAM AS WELL AS BENEFICIARIES OF THE SHARED INFORMATION AND DATA BASE.

COUNTY AGENTS I IMAGINE WOULD BECOME THE PRIMARY USERS OF THE CENTER AS THEY FACE AN EVER INCREASING DEMAND FOR TECHNOLOGICAL INFORMATION.

MR. CHAIRMAN, I REALIZE THE PRESSURE ON YOU AND THIS COMMITTEE REGARDING FUNDING. I BELIEVE THE SMALL AMOUNT SPENT ON THIS PROJECT WOULD SAVE SMALL FARMERS MANY TIMES THAT AMOUNT. ALL I ASK IS THAT YOU GIVE THIS REQUEST THOUGHTFUL CONSIDERATION.

THANK YOU.

Mr. WHITTEN. We will now hear from Ms. Peggy Wheeler.

Ms. WHEELER. Mr. Chairman, it is a pleasure to be here and I thank you for the opportunity to testify.

My name is Peggy Wheeler. I work for the National Center for Appropriate Technology. And I am here today to talk about a program, a new program of concepts that we call ATTRA, Appropriate Technology Transfer for Rural Areas. And I would like my remarks included in the record

Mr. WHITTEN. We will be glad to have them included in full.

Ms. WHEELER. Great.

And I also—Mr. Barringer had hoped to testify today. He was unable to make it from Agricenter, and I am here in his behalf also, and have his remarks.

Mr. WHITTEN. We will be glad to have those included.

May I say that some weeks ago I visited with him about what they have in mind. You have heard the problems that we are up against. So we must work within the limits of seeing what is possible.

You might go ahead and touch on the high spots if you would like.

Ms. WHEELER. ATTRA, the reason we developed this program concept and why we have been working for a couple of years at trying to get it started is mainly from two standpoints.

The National Center for Appropriate Technology, NCAT, works heavily in terms of trying to help farmers and rural communities from a self-help standpoint. And in that regard, one of the things that became a concern to us was from the standpoint, as you are very aware, men have worked very directly on, and we appreciate the work you have done and the other members of this Committee in terms of helping small progress and moderate type farmers.

What I am trying to convey is that what we have centered on in this program, ATTRA, is two areas, that we feel in addition to all the other work that is happening within the price support area, within the farm credit area, to try and help farmers stay on the land and help communities stay in rural areas.

But there is one other area which needs a great deal of concentration and which could help from a cash flow standpoint, and that is low input farming. That area, and also the area of community resource management, is what we call it from the standpoint of the types of savings that communities could achieve if they were able to reduce their water use, their energy use, and approach planning from a slightly different perspective, which gets into the use on a local basis of resources, whether it is land, human resources, forestry, et cetera, so that you save more of your dollars locally.

Now, from that joint standpoint of working with farmers so that they cut their water use, so that they cut their chemical use from the standpoint of hoping some more cash flow to help them make it through the extremely desperate time that many of the medium-sized farmers and smaller farmers are facing. That was the area that ATTRA—why we began to devise the idea of ATTRA.

In this regard, we found two areas that created the concept that we felt was very needed. This was after many conversations with the USDA, with the Ag Committee, and we did work this through the Farm Bill last June with Mr. Jones' help.

Those conversations led to two gaps. One gap was in the need for centralized information in low input farming and community resource management. There was a great deal of work going on, including within your State the Extension Service has done a great deal of integrated pest management and found great savings possible.

In many of the other States, there is spot work going on in this regard. But what they were finding and what many Extension Directors have been finding is that their individual State specialists have to access the information themselves. They have to find out what the Department of the Interior has done in this regard, or EPA or the private sector. So there was a need for a centralized data base. And then there was a need for trained specialists working through Extension because—and this issue I would like to stress very much. We have been working very heavily with many of the Extension Directors on the development of this idea and on the concept that if ATTRA got started, which would be a small center at Agricenter down in Memphis, it would be working through and needing the network of Extension. We are very much in support of maitaining Extension at its current levels, the reason being, from our bias, that these types of technologies, low input technologies, community resource management technologies are very hands on. They cannot be bought off the shelf and instantly implemented. You need that network of Extension specialists working with the farmers in order to transfer the technology successfully.

And so what we envisioned was only a very small group of specialists accumulating a centralized data base, and then working through that network of Extension in order to reach all the communities and farmers possible to convey to them the successes that are out there in terms of cutting these types of costs.

The savings potential, we did a great deal of work trying to accumulate information on the types of savings potentials that are out there. We came up with many statistics that we think and are part of the testimony. I will only refer to a couple of them.

The most striking ones happen to be, particularly within the fertilizer area, it is a conservative estimate of what you can save through fertilizer application efficiency, or through contortion of the role, the erosion, you can save up to $2 billion.

We do have as part of the packet that you all received State-by-State statistics that we have been gathering in terms of the fertilizer costs in all the individual States, what farmers are spending on fertilizer. And overall it is a $2 billion national figure, but in many of the States this could mean a great deal of cash flow generated in our rural areas. That is the most pinpointable one.

We have been trying to gather the statistics on pesticides because the Extension Service, when they did their cooperative extension IPM study in 14 States, did come out with the statement that 40 percent could be saved through the use of integrated pest management. And on a national basis this means another $2 billion.

Statewide it is virtually impossible to get hold of these statistics at this time. But the savings is very possible. And in addition to the savings, the only other thing that I would like to emphasize is what would be conveyed through a progrma of this nature is not only the types of technologies that have been developed all over this country through our agency work and through the dedicated efforts of the private sector, but also the numerous successes which exist within many communities and on many farms that could really, if released in an effective manner to our farmers, predominantly our medium-sized to smaller farmers, could really attain an immediate cash flow savings for them. And in our position at this time, the problem is so dire that we feel that there is some importanced for that.

[The full statement of Ms. Wheeler and the statement from Mr. John Barringer follow:]

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815 15th Street, N.W., Suite 938, Washington, D.C. 20005 (202) 347-9193

Testimony by Peggy Wheeler, Public Affairs Director
National Center for Appropriate Technology
before

The House Agriculture Appropriations Subcommittee

April 14, 1986

Mr. Chairman, Members of the Committee, thank you for this opportunity to testify. My name is Peggy Wheeler. I am the Public Affairs Director of the National Center for Appropriate Technology, NCAT. I am here today on behalf of NCAT and John Barringer of Agricenter International to ask for your funding support for a new program we call ATTRA, Appropriate Technology Transfer for Rural Areas. ATTRA would need $1.8 million through USDA grant authority to start up in FY 1987, managed by NCAT at Agricenter International in Memphis, Tennessee. (I have included a budget summary as an appendix, for your information.)

NCAT is a non-profit corporation created by Congress in 1976 to transfer appropriate technologies to the American public. An "appropriate technology" is that technology which is best suited to the specific cultural, economic, social and ecological conditions at the site of its application. The design or adaptation of such technologies conserves and maintains natural resources, is low-cost, uses site-available natural and human resources, is manageable by users, and harmonizes with the environment. Our principal methods in technolgy transfer are technical monitoring and evaluation, technical assistance, and information dissemination including publications and training. We manage federal, state and private sector contracts in this regard.

NCAT developed the ATTRA concept in response to gaps we detected as a result of our work in the technology transfer area. These gaps relate to the transfer of technical information and assistance on low input farming, crop, marketing and processing diversification, and community resource management. The gaps are in two areas: the first being a need to have a centralized, peer reviewed data base system on these low input farming and community resource management technologies collected from all sources of research and development, federal agencies, public and private sector; the second gap being the need to have sytematic technical implementation assistance transfer through training of extension and communities, publications, and a 900 line connecting extension, rural networks, communities, and businesses with appropriate technology specialists trained at transferring the technologies on the data base.

Therefore, ATTRA, if funded, would accomplish two main goals. First, it would develop a broad, peer reviewed database, drawn from all relevant federal and state agencies and public and private sector organizations, of low input farming technologies, practical information on current use of such technologies, community resource management systems to reduce operating costs, local crop production, marketing, and processing diversification methods, and practitioners of these technologies.

The second goal would be the transfer of these technologies to extension agents, farmers, rural networks, and rural communities and businesses through the use of a 900 telephone line staffed by technical specialists. The specialists would provide technical implementation assistance and referrals to local projects that practice such management techniques. Additionally, ATTRA would provide workshops and publications to train extension agents and communities in the uses of particular low-input, low-operating cost methods.

By funding ATTRA, Congress would be helping to expedite the transfer of low-input farming technologies and community resource management systems to extension services, farmers, and rural communities and businesses. Such emphasis on these technologies is needed because their use can have substantial impact on reducing cash flow requirements and operating costs of farms and rural communities. The use of these technologies also can alleviate the serious environmental problems and lessen the depletion of resources caused by the overuse and mismanagement of water supplies, chemicals, soil and energy supplies on our farms and in our communities.

You all know this country is losing farms rapidly, while rural banks and rural communities go bankrupt. You have been thoroughly appraised of the soil erosion, groundwater pollution, and water depletion problems we face.

But the savings potential related to the successful transfer of the technologies I speak of today, low-input farming, conservation and sustainable agriculture, community resource management, crop diversification, and alternative marketing and processing systems aimed at achieving greater local and state economic stability while improving local resource utilization, is only beginning to be acknowledged.

Let me give you a few facts:

On Farm Savings:

** Up to $2 billion of the $9 billion spent on fertilizer and lime each year could be saved simply through applying the fertilizer more efficiently.(RAA)

** Another $2 billion of fertilizers lost through erosion and leaching could be saved through erosion control technologies.(USDA,NCAT)

** Use of Integrated Pest Managment would save about $2 billion of the $4.94 billion spent on pesticides.(USDA)

** Water use can be reduced on farms 36-56%, thus reducing water and pumping costs. (Nebraska, Arizona, NCAT)

** $3.31 billion of energy costs could be saved through different farm management techniques. (GAO)

Community Savings

** A minimum of $180 million could be saved in rural communities of 50,000 or less through use of basic water conservation technologies.(NCAT,EPI)

** The off-farm costs of soil erosion, $2.2 billion, mainly paid for by rural communities to clean up ditches, highways, water purification and sediment filtration could be reduced 25-90%.(Cons.Fdn'n)

** Energy cost reduction of 10-20% could be easily experienced by rural communities through street light changes, water conservation, sewage teatment plant renovations, and other energy conservation techniques. This would range in savings of thousands to millions of dollars for individual communities.(NCAT)

Let me go into further detail about how information provided by ATTRA could help reduce fertilizer costs by up to 40%, as an example. There are two ways to cut fertilizer requirements in farming: through reduction of erosion and by more efficient application. Crop uptake of fertilizer applied in conventional farming techniques is generally around 50%; this means that 50% of the primary nutrients (nitrogen, phosphate, and potash) in the fertilizer does not reach the crops. Almost all of this is lost through erosion and runoff. Better tillage techniques, such as conservation tillage, reduce erosion by at least 50% (in some instances by up to 95%). Thus, simply by using different tillage techniques, one half of the nutrients in fertilizer applications that are lost (or 25% of the total application) could be saved.

In addition, the Regenerative Agriculture Association has estimated that farmers could save another $2 billion a year by more careful application of fertilizer. Many farmers use far more fertilizer than is necessary (an average of $42 an acre more), due largely to the inadequate calculations of existing nutrient content in the soil and failure to include primary nutrients returned to the soil by legumes in nutrient calculations. Application of fertilizer before rains and at inappropriate points in the growing season also add to fertilizer costs without increasing yield. These costs could be eliminated with better dissemination of existing knowledge.

Furthermore, many models exist and new ones emerge daily of rural community successes at achieving better economic stability through approaching local resource and employment problems in a manner that uses local natural and human resources to fill as many local or state needs as possible prior to export. This approach curtails unnecessary export of dollars spent on imported energy, food and farm imports while reducing environmental cleanup costs to communities and farmers.

For example: Working with American Farmland Trust, a group of dairy farmers in a valley in Vermont decided that they needed to make entirely new cheeses to meet the higher price market for European style cheeses and yogurts; they are now processing and marketing such cheeses and getting a higher return for their product. The community of Berea, Kentucky is learning to process its raw lumber to the kiln dried and furniture stages to retain more dollars in the community; a town in North Carolina, working with the TVA, has started a tomato coop, successfully marketing a new tomato strain while lessening its dependence on tobacco. The State of Texas Department of Agriculture conducted a blueberry market analysis, and based on its findings is now working with farms communities toward successful production and marketing. Farmers in Indiana are investigating marketing hay in Florida through a cooperative arrangement. The State of Nebraska is taking a serious look at its state resources to see what alternative uses might be made of them to keep more dollars in state while preserving its land and water. Three communities in California, Illinois, and Arizona cut their water use and saved millions of dollars in energy and water costs. Missouri studied potential savings if energy use were reduced in communities and found easily obtainable savings of 10% across the state.

There is a great deal of transfer occurring in these technologies in many isolated instances around the country. Conferences on groundwater pollution, sustainable agriculture, water depletion, are conducted constantly. Individual states are taking serious looks at resource planning.

The Institute for Alternative Agriculture is now producing a scientific, refereed journal on alternative agriculture to meet the need scientists had for a forum to publish their work on alternative agriculture technologies and approaches.

ATTRA would be the next link in the evolving process of technology transfer by 1) centralizing the excellent, but scattered, information bases on these technologies in a way that is accessible to extension agents and state specialists, thereby eliminating the need for each individual to constantly track down information from EPA, DOI, DOE, and private colleges and universities in addition to following the well-maintained network of USDA and SAES, and by, 2) providing this information through technical implementation assistance, data interpretation, and practitioner referral to extension, farmers, rural communities, businesses and residents.

We recommend that ATTRA be located at Agricenter International in Memphis, Tennessee and managed by NCAT, for several reasons. Agricenter is a brand new international agriculture education and technology demonstration trade center. ATTRA's location at this new, vital location will provide the people, organizations, agencies, and businesses who come to Agricenter with ready access to a data base of low input and lower operating cost technolgies. Specialists trained to assist the public in the use of these technologies will be available. Agricenter offers NCAT a place to set up ATTRA in a flexible, rapid manner requiring no building construction and having the benefit of Agricenter's growing recognition and vitality. The facilities are ideal for the extension and community training components of ATTRA.

ATTRA and Agricenter International should unite to offer the American public a fresh, exciting place to learn of the new technologies and methods that can keep our farms and rural communities strong, flourishing and competitive.

The $1.8 million start up cost for ATTRA through a grant to NCAT which will manage it at Agricenter International, will help to transfer these cost-cutting, diversified options to our farmers and rural communities which are right now on the edge of disaster. The very large scale farmers may not blink at $20,000- $100,000 saved by cutting fertilizer, pesticide, water and energy costs, but the medium and moderate sized farmers at the brink will know that such savings could mean holding onto their farms. Making such information easily available to farmers and communities, while training and working with the extension and community network throughout the country so their knowledge of such technologies is honed for effective transfer, will expedite the transfer of these needed options.

Why use NCAT? Because NCAT is truly a unique national center for appropriate technology in this country. For ten years, NCAT has transferred information through publications, training workshops, toll-free service, technical monitoring and research analysis. Clients include federal, state, and local agencies, the public, businesses, farmers and rural communities. NCAT is deeply committed to transferring appropriate technologies. We want people and communities to learn more about and to practice technologies that will keep the production of food, energy, housing, and the other basics of life a bit closer to home so their source is stable and sustainable for the forseeable future. To do so requires that our natural resources be conserved and maintained, and our industries, crops, marketing and processing systems be diversified in order to be sensitive to local job and resource requirements. We have been successful at such transfer, but more resources are needed to grapple with the complex and challenging needs of our rural communities and our small to medium sized farmers today. ATTRA is needed now.

Thank you for your attention to this. I hope you will consider what I have said and include ATTRA in the USDA FY 1987 budget. NCAT believes that it is a program which needs to be started.

Aside from support for ATTRA, I wish to mention two other areas NCAT strongly supports: the continuation in full strength of the Extension Service and the Cooperative Extension system, and the funding of the Agricultural Productivity Act research and demonstration farms as passed by the Farm Bill of 1985 at a level of $2 million dollars.

We support the need for a strong Extension system. If low input farming, crop diversification, community resource management and alternative marketing and processing are to be transferred from ATTRA to farmers and communities, Extension is most definitely needed in full force. These technologies are not just "off the shelf" types which can be purchased, carted out to the field and used. When talking of reducing chemicals, energy, and water, substitutions need to occur. These substitutions can be local forms of energy or nutrients or simply more intense management and use of labor in new, sometimes more complex arrangements. This type of technology change requires hands on training and constant attention. If ATTRA is funded we need extension in place in order for ATTRA to work effectively. Therefore, we recommend its continuation at current levels.

As for the Agriculture Productivity Act, the research which will be supported by its funding is the next step in the necessary technology development for low input farming, resource management, and conservation approaches. While much has been learned over the last thirty years in these areas, a great deal more needs to be researched to further our understanding of nutrient cycles, water conservation techniques, impacts of crop diversification, and impacts of varied farming techniques on groundwater. This is one more part of the continuing linkage of the research and transfer of technologies in these vitally important areas to our agricultural system's sustainability and growth.

FERTILIZER CONSUMPTION BY STATE, 1984
In dollars (Tonnage in Parentheses)

	TOTAL	COMMERCIAL	DIRECT APPLICATION		
STATE	USAGE	MIXTURES	N	P205	K20
ALABAMA	$173,616,490	$97,054,280	$59,423,228	$5,084,200	$5,133,371
	(913,771)	(510,812)	(316,081)	(23,110)	(37,089)
ALASKA	2,443,400	1,824,950	646,720	85,800	18,070
	(13,565)	(9,605)	(3,440)	(390)	(130)
ARIZONA	69,437,780	15,501,150	35,371,260	6,242,060	115,787
	(328,967)	(81,585)	(188,145)	(28,373)	(833)
ARKANSAS	167,711,480	73,382,750	83,860,408	2,058,100	4,505,268
	(882,692)	(386,225)	(446,066)	(9,355)	(32,412)
CALIFORNIA	744,196,370	143,896,680	310,280,088	41,434,580	12,797,452
	(3,916,823)	(757,352)	(1,650,426)	(188,339)	(92,068)
COLORADO	105,564,000	18,200,480	68,757,804	5,967,500	3,556,732
	(555,600)	(95,792)	(365,733)	(27,125)	(25,588)
CONNECTICUT	10,387,680	7,664,220	1,063,516	242,000	169,163
	(54,672)	(40,338)	(5,657)	(1,100)	(1,217)
DELAWARE	27,472,290	12,307,250	11,605,616	379,060	2,145,187
	(144,591)	(64,775)	(61,732)	(1,723)	(15,433)
D.C.	1,534,250	1,368,000	46,060	3,300	4,865
	(8,075)	(7,200)	(245)	(15)	(35)
FLORIDA	373,669,200	307,975,370	31,889,312	3,409,120	12,011,268
	(1,966,680)	(1,620,923)	(169,624)	(15,496)	(86,412)
GEORGIA	363,770,770	201,243,690	109,024,208	4,159,760	8,192,243
	(1,914,583)	(1,058,651)	(579,916)	(18,908)	(58,937)
HAWAII	24,386,120	15,873,360	2,842,748	2,203,080	2,637,247
	(128,348)	(83,544)	(15,121)	(10,014)	(18,973)
IDAHO	118,340,740	23,542,140	76,945,768	12,296,240	2,622,513
	(622,486)	(123,906)	(409,286)	(55,892)	(18,867)
ILLINOIS	831,714,170	255,646,710	351,732,500	47,344,660	152,758,915
	(4,127,448)	(1,345,509)	(1,870,918)	(215,203)	(1,098,985)
INDIANA	498,806,620	234,562,790	173,966,740	11,747,780	54,883,177
	(2,625,298)	(1,234,541)	(925,355)	(53,399)	(394,843)
IOWA	726,113,120	217,050,300	360,898,276	13,606,120	115,612,416
	(3,821,648)	(1,142,370)	(1,919,632)	(61,846)	(831,744)
KANSAS	288,042,280	84,562,730	186,102,704	3,336,080	8,174,312
	(1,516,012)	(445,067)	(989,908)	(15,164)	(58,808)
KENTUCKY	191,574,720	85,227,540	63,036,024	8,652,820	24,444,123
	(1,008,288)	(448,566)	(335,298)	(39,331)	(175,857)
LOUISIANA	137,468,230	73,195,030	53,325,824	1,769,900	5,370,126
	(723,517)	(385,237)	(283,648)	(8,045)	(38,634)
MAINE	17,470,690	15,465,240	1,181,392	238,260	313,167
	(91,951)	(81,396)	(6,284)	(1,083)	(2,253)
MARYLAND	69,876,490	39,558,380	21,059,384	2,358,620	3,860,308
	(367,771)	(208,202)	(112,018)	(10,721)	(27,772)
MASS.	10,695,670	7,922,050	647,848	139,700	327,345
	(56,293)	(41,695)	(3,446)	(635)	(2,355)
MICHIGAN	287,538,590	131,329,900	84,199,936	4,364,360	43,682,557
	(1,513,361)	(691,210)	(447,872)	(19,838)	(314,263)
MINNESOTA	383,329,180	131,499,950	137,531,024	11,977,020	71,717,745
	(2,017,522)	(692,105)	(731,548)	(54,441)	(515,955)
MISSISSIPPI	165,549,410	77,998,420	71,959,632	5,423,000	7,173,929
	(871,839)	(410,518)	(382,764)	(24,650)	(51,611)

STATE	TOTAL USAGE	COMMERCIAL MIXTURES	DIRECT APPLICATION		
			N	P_2O_5	K_2O
MISSOURI	$298,617,110	205,345,350	75,216,168	3,098,040	7,735,072
	(1,571,669)	(1,080,765)	(400,086)	(14,082)	(55,648)
MONTANA	88,139,480	39,484,720	43,177,960	6,299,260	2,850,334
	(463,892)	(179,476)	(229,670)	(28,633)	(20,506)
NEBRASKA	351,396,450	84,566,720	241,429,412	4,306,280	11,154,611
	(1,849,455)	(445,088)	(1,284,199)	(19,574)	(80,249)
NEVADA	5,667,890	1,048,990	2,156,360	822,580	18,209
	(29,831)	(5,521)	(11,470)	(3,739)	(131)
NEW HAMPSHIRE	4,158,340	2,925,050	419,992	109,780	298,294
	(21,886)	(15,395)	(2,234)	(499)	(2,146)
NEW JERSEY	39,333,800	32,469,670	3,406,748	220,220	313,584
	(207,220)	(170,893)	(18,121)	(1,001)	(2,256)
NEW MEXICO	24,923,060	6,317,500	14,280,104	1,425,160	1,424,472
	(131,174)	(33,250)	(75,958)	(6,478)	(10,248)
NEW YORK	124,389,580	79,111,250	20,849,764	8,572,300	9,724,857
	(655,560)	(416,375)	(110,903)	(38,965)	(69,963)
N CAROLINA	351,762,580	212,301,250	101,323,540	2,486,000	9,512,187
	(1,851,382)	(1,117,375)	(538,955)	(11,300)	(68,433)
N DAKOTA	104,758,590	48,283,370	50,005,180	2,219,580	2,763,320
	(551,361)	(254,123)	(265,985)	(10,089)	(19,880)
OHIO	372,989,950	145,672,620	129,612,276	17,341,940	58,361,235
	(1,963,105)	(766,698)	(689,427)	(78,827)	(419,865)
OKLAHOMA	151,403,400	52,512,200	90,660,932	2,222,220	5,057,098
	(796,861)	(276,380)	(482,239)	(10,101)	(36,382)
OREGON	97,978,440	17,838,150	58,927,284	13,909,500	4,581,162
	(515,676)	(93,885)	(313,443)	(63,225)	(32,958)
PENNSYLVANIA	96,007,380	71,404,470	19,561,212	1,189,540	2,646,143
	(505,302)	(375,813)	(104,049)	(5,407)	(19,037)
RHODE ISLAND	4,495,970	3,970,620	116,560	106,480	36,001
	(23,663)	(20,898)	(620)	(484)	(259)
S CAROLINA	133,417,050	82,212,620	42,046,764	1,280,400	3,524,762
	(702,195)	(432,698)	(223,653)	(5,820)	(25,358)
S DAKOTA	78,882,680	29,123,010	42,462,244	3,384,920	2,772,077
	(415,172)	(153,279)	(225,863)	(15,386)	(19,943)
TENNESSEE	137,000,450	61,147,510	42,169,340	6,383,520	20,109,408
	(721,055)	(321,829)	(224,305)	(29,016)	(144,672)
TEXAS	583,764,930	330,784,110	228,322,804	11,832,040	4,520,141
	(3,072,447)	(1,740,969)	(1,214,483)	(53,782)	(32,519)
UTAH	20,196,810	4,138,770	11,831,592	4,598,000	27,800
	(106,299)	(21,783)	(62,934)	(20,900)	(200)
VERMONT	9,938,330	7,453,320	1,387,064	351,120	430,483
	(52,307)	(39,228)	(7,378)	(1,596)	(3,097)
VIRGINIA	138,151,090	98,356,160	29,896,700	1,016,180	2,261,808
	(727,111)	(517,664)	(159,025)	(4,619)	(16,272)
WASHINGTON	169,119,000	27,961,920	111,621,052	12,281,500	7,049,107
	(890,100)	(147,168)	(593,729)	(55,825)	(50,713)
W VIRGINIA	14,344,050	8,126,490	3,647,388	693,220	1,277,827
	(75,495)	(42,771)	(19,401)	(3,151)	(9,193)
WISCONSIN	287,682,420	83,178,010	78,538,504	20,290,820	74,134,399
	(1,514,118)	(437,77[illegible]	(417,758)	(92,231)	(533,341)
WYOMING	13,502,540	2,485,960	9,330,816	1,491,160	186,399
	(71,066)	(13,084)	(49,632)	(6,778)	(1,341)
US TOTAL	9,492,965,060	4,023,016,680	3,687,765,888	324,332,580	775,860,748
	(50,056,151)	(21,173,772)	(19,615,776)	(1,474,239)	(5,581,732)

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AGRICENTER INTERNATIONAL

JOHN BARRINGER
President

Testimony by John Barringer, President
Agricenter International
Memphis, Tennessee
before
The House Agriculture Appropriations Subcommittee

April 14, 1986

Testimony by John Barringer, President
Agricenter International
Memphis, Tennessee
before
The House Agriculture Appropriations Subcommittee

April 14, 1986

Mr.Chairman, Members of the Committee, I thank you for the chance to testify before this committee. My name is John Barringer. I am the President of Agricenter International in Memphis, Tennessee. I am here today to speak in support of ATTRA, Appropriate Technology Transfer for Rural Areas, to be managed by the National Center for Appropriate Technology at Agricenter International. The start-up costs of ATTRA would require $1.8 million, to be funded through a USDA FY 1987 grant to NCAT located at Agricenter International.

Agricenter International is located within the boundaries of Memphis on land owned by Shelby County. Its thousand acres of land and its show buildings are available for lease by agricultural businesses, organizations, universities, or agencies for display of products, educational seminars, and demonstrations. The buildings have just been completed and are already 60% leased. The land has irrigation displays, hydroponics, and a forestry unit. There are plans for an aquaculture exhibit, biomass exhibit, orchards, alternative crops, conservation systems, and much more. This will all take time but we are very excited about the capability of Agricenter to show people here and from other countries the vast potential of both our technology developments and those of other countries as well. Farmers and urban people need to understand the role of agriculture in our overall economy and in the world economy. I think Agricenter will help to convey this concept effectively while it helps our businesses, particulrarly small businesses, market their products.

I have been encouraging NCAT to locate ATTRA at Agricenter if funding is arranged because it would be one of the major pieces to the puzzle that I am trying very hard to put together. At Agricenter, I hope to offer farmers, businesses, and rural communities options — new and successful options that provide our rural people and our urban people with the means to help our food and fiber production, processing, and marketing research reach a new level of sustainability through diversity and competition.

Having grown up in the cotton business, and been a farmer myself, I have seen this country become one of the great agricultural leaders of the world. To hold this position, I believe we need to take a stronger look at cutting some of our dependence on inputs that require such a high cash flow and debt level. We need to diversify a bit — open up some more markets, broaden our crop and farm management techniques.

I hope to offer some of the small businesses that are developing new products and new machinery options a chance to reach broader markets by displaying at Agricenter. In addition, by having a program like ATTRA, managed by NCAT, at Agricenter, we will be able to provide farmers and rural communities with low-cost options through the development of a data-base and the offering of technical implementation assistance to farmers, extension, and rural communities.

Statistics show potential savings of billions of dollars by cutting down input costs, while diversification of our systems will help to stabilize local economies, as it frees up some of the dollars spent on imported inputs either to the farms or to the communities. Extension and communities need access to a centralized data-base on such systems and to a trained staff able to interpret and transfer this information. ATTRA would provide this access, while helping to complete the overall unit that is Agricenter by leasing space in our central building. I urge you to help start ATTRA at Agricenter by funding it through a grant of $1.8 million in the USDA FY 1987 budget to NCAT located at Agricenter.

And I invite you all to come see Agricenter the next time you are in Memphis. I think you'll find it an exciting place. Thank you.

MONDAY, APRIL 14, 1986.

SOYBEAN CYST NEMATODE RESEARCH

WITNESS

HON. BILL EMERSON, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF MISSOURI

Mr. WHITTEN. Our colleague, Mr. Bill Emerson, is present. We will be glad to hear from him now.

Mr. EMERSON. Thank you, Mr. Chairman, Mrs. Smith. I, first of all, want to thank you for giving me this time to come before your distinguished Subcommittee this afternoon to speak on behalf of continued funding for soybean cyst nematode research. Also I want to thank you, Mr. Chairman, and Mrs. Smith, and other members of this Subcommittee, for your help in previous years in funding this vitually important research.

Mr. Chairman, most representatives from rural districts, and certainly those soybean producing districts, are familiar with cyst nematodes. These parasites have spread throughout the Nation and cause severe hardships for many farmers by reducing soil productivity and crop yields.

Indeed, scientists have told me they estimate that cyst nematodes zap productivity to the tune of about $2 billion a year nationwide.

For the past several years, research on the cyst nematode problem has been conducted in Southeast Missouri at the Delta Area Agricultural Research Center in Portageville. The Delta Center is particularly suited to research of this type because of its past work on the problem and because Southeast Missouri is so infested with these little nematode critters. Cyst nematodes are affecting the soybean industry in much the same way that the boll weevil affected the cotton industry. And most of the progress that has been made in the control and eradication of cyst nematodes is a result of the research conducted at the Delta Center.

In recent years, the Delta Center has received $300,000 annually to conduct its research, and today I am asking this Subcommittee to maintain that level of funding. $300,000 is the minimum needed to continue this important research.

As you know, funding for cyst nematode research was not included in the Administration's budget request for fiscal year 1987 and, in fact, it never has been included by an Administration request. But this Committee and the Congress, in its wisdom, has always transferred sufficient funds from other accounts for this vital research. In so doing, we have been able to fund the cyst nematode research without increasing the overall Agriculture budget. This year in particular, that is a most important consideration as I know you are already far too well aware.

Mr. Chairman, it is my hope that we can once again meet this important need without increasing the total spending. If we do as we have done in the past, I believe we will be saving a number of farmers from financial ruin in the long run, thus saving the Federal Government hopefully many times the $300,000 that we would spend this year. And I urge you and the Subcommittee once again to give your approval to this important request.

Mr. WHITTEN. Thank you very much.

We appreciate your problem, we also appreciate you and your fine work in connection with flood control and many other things.

Mr. EMERSON. We are going to be before you tomorrow on that issue I think.

Mr. WHITTEN. Yes. I may have to be absent but I will still be there tomorrow night.

We are indeed aware of the lower boot of Missouri—I have been there numerous times—and we do appreciate their problem.

I may say that the Appropriations Committee historically has stayed below the budget, even though we have entitlements and other things. What we have had to do is adjust the tremendous increases that have been asked for other activities, such as foreign aid and increased carryover military.

So I hope that we can hold the line at this year's level on these many things. But we will have to take from other sources, because the budget provides or requests tremendous decreases in most of the activities of the Department of Agriculture. I think OMB is kind of kicking around the base of our economy-agriculture. You can put up with a hole in the roof of your house, but you cannot afford to kick out the blocks that support the foundation.

Mr. EMERSON. Correct.

Mr. WHITTEN. And I have kept the chairmanship of this Committee because I think agriculture is basic to our well-being. You have made a mistake when you kick around the biggest industry you have, the biggest market for industry and labor, and the place where independent farmers still exist. So I hope we can rectify it to some degree.

Mr. EMERSON. Thank you, Mr. Chairman.

Mr. WHITTEN. Thank you very much.

Mrs. SMITH. I want to also thank our colleague for being here. I appreciated that testimony very much. You know, it is not only in Missouri that cyst nematodes are a very big problem. It is wherever soybeans are grown, including Nebraska.

Mr. EMERSON. Indeed.

Mrs. SMITH. And so all that is being done there is very important to the whole Midwest section.

Mr. EMERSON. I believe it is 26 States. Mrs. Smith, that have the problem, so it a national problem. And as I indicated earlier, scientists tell me that it saps about $2 billion worth of productivity annually. So we are even trying to keep abreast of the research with these funds that you have provided year by year. We cannot ever seem to get way ahead of it. These nematodes are always fighting back. And what progress we make, they seem to catch up.

So we are ever into the business of developing new strains, nematode resistance strains of soybeans for our farmers to use so they can plant and have the productivity that they otherwise deserve. But it is an ongoing battle. We are keeping abreast of it, but we are not getting ahead of it.

Mr. WHITTEN. Thank you very much.

Mr. EMERSON. Thank you. Thank you very much.

[Congressman Emerson's full statement follows:]

STATEMENT OF
CONGRESSMAN BILL EMERSON

SUBCOMMITTEE ON AGRICULTURE, RURAL DEVELOPMENT,
AND RELATED AGENCIES

APRIL 14, 1986

Mr. Chairman, I want to thank you for allowing me to come before your Subcommittee to speak on behalf of continued funding for cyst nematode research. Also, I want to thank you, Mrs. Smith, the Ranking Minority Member, and the other members of this Subcommittee for your help and assistance in previous years in funding this vitally important research.

Mr. Chairman, most representatives from rural districts, and certainly those from soybean producing districts, are familiar with cyst nematodes. These parasites have spread throughout the nation and cause severe hardships for many farmers by reducing soil productivity and crop yields.

For the past several years, research on the cyst nematode problem has been conducted in Southeast Missouri at the Delta Area Agricultural Research Center in Portageville, Missouri. The Delta Center is particularly suited to research of this type because of its past work on the problem and because Southeast Missouri is infested with cyst nematodes. Cyst nematodes are affecting the soybean industry in much the same way that the boll weevil affected the cotton industry and most of the progress that has been made in the control and eradication of cyst nematodes is a result of the research conducted at the Delta Center.

In recent years, the Delta Center has received $300,000 annually to conduct its research and today I am asking this subcommittee to maintain that level of funding. Three hundred thousand dollars is the minimum needed to continue this important research.

As you know, funding for cyst nematode research was not included in the Administration's budget request for Fiscal Year 1987. In fact, the Administration has never regested this funding, but the Congress, in its wisdom, has always transferred sufficient funds from other accounts to fund this vital research effort. In so doing, we have been able to fund cyst nematode research without increasing the overall Agriculture budget. This year in particular, that is a most important consideration, as I am sure I don't need to tell you.

Mr. Chairman, it is my hope that we can once again meet this important need without increasing total spending. If we do as we have done in the past, I believe we will be saving a number of farmers from financial ruin in the long run, thus saving the federal government many times the $300,000 we will spend this year. I urge the Subcommittee to give its approval to this urgent request.

Once again, thank you for allowing me to appear before your today.

MONDAY, APRIL 14, 1986.

PLANT STRESS AND WATER LAB

WITNESSES

DR. SAM E. CURL, DEAN, COLLEGE OF AGRICULTURAL SCIENCES, TEXAS TECH UNIVERSITY, LUBBOCK, TEXAS

DR. ROBERT C. ALBIN, ASSOCIATE DEAN, COLLEGE OF AGRICULTURAL SCIENCES, TEXAS TECH UNIVERSITY

Mr. WHITTEN. Dr. Sam Curl of Texas Tech University is here. How are you, sir?

Dr. CURL. Mr. Chairman and Mrs. Smith, I am Sam Curl, Dean of the College of Agricultural Sciences of Texas Tech University. With me today is Dr. Robert Albin, our Associate Dean for Research.

We are most appreciative for the opportunity to appear before the Committee today on behalf of urgently needed research in the area of plant stress and water conservation.

A cooperative research effort has been undertaken jointly by the USDA, ARS, Texas Tech University, and the Texas Agricultural Experiment Station, to address this critical problem.

The background setting for this research is found in Senate Document 59, the feasibility study conducted by USDA in 1977, and the statement of Texas Tech University submitted for the record before this Committee in 1979.

The Southern Great Plains is one of the most intensively developed and highly productive agricultural regions of the United States. Almost all of the water presently used to support this agriculture comes from a rapidly declining and virtually non-rechargeable groundwater reservoir, the vast Olavao Aquifer.

Estimates of the future life of the water supply from this formation vary, but all agree that it is finite. Many wells in the southern part of the formation are already going dry.

In addition, the escalating cost of energy required to lift the water in a number of areas has become prohibitive. The need is urgent for genetically improved varieties possessing more efficient stress tolerance and improved water use mechanisms, and the development of cultural practices for maximizing water use efficiency.

Now, our cooperative research program focuses on these objectives. An in-depth statement, including an updated report on the progress of the research planning and program activities to date has been submitted for the record.

Our past testimony has presented a comprehensive assessment of the problem and recommendations for what we firmly believe is a viable and cost-effective Federal, State Cooperative Research strategy for dealing with this complex agricultural problem facing the Southern Great Plains and the area in Southwest.

The Committee has shown a concerned interest in the problem we have brought to your attention. In fiscal year 1977, Congress appropriated $100,000 to initiate a feasibility study to determine the most appropriate program and location for the Plant Stress and

Water Conservation Laboratory initially identified in Senate Document 59. That study was delivered to the Congress in March 1978.

In fiscal year 1979, Congress appropriated $800,000 to initiate planning for the research program and proposed facility in cooperation with Texas Tech University in Lubbock.

In fiscal year 1983, Congress appropriated $500,000 to complete planning for the laboratory. The research program plan and the architectural plans and specifications for the laboratory have been completed. A cooperative USDA-ARS Research Unit is in place in Lubbock, occupying temporary space on the campus of Texas Tech University and the Texas Agricultural Experiment Station north of Lubbock.

In fiscal year 1980, Congress appropriated $200,000 to initiate basic research on the problem. Congress appropriated $400,000 for the research program for FY 1981, 450,000 for FY '82, 750,000 for FY '83, 750,000 for FY '84, 900,000 for FY '85, and 1,150,000 for FY '86.

On behalf of all who are working on the problem, we wish to express our appreciation for your past support which has allowed us to get the research program off the ground and moving in a very positive direction.

We believe this program and facility should be of top priority. It is not a program dealing with a single crop or a problem of local proportions. It represents, rather, a comprehensive investment in the future which will help to avert an economic disaster throughout a portion of over six States wherein a large and very significant proportion of our agricultural productive capacity is found.

The current research program is recognized as a national center for excellence, and plant stress and water conservation research. A technical relationship has been established with the USDA, ARS Plant Gene Expression Center in California.

Further evidence of the stature of this program includes, first, the receipt of a competitive grant of $400,000 of State funding from the Texas Advanced Technology Research Program and, secondly, charter membership in the newly created Southwest Consortium for Plant Genetics Research, developed largely as a result of the interest of Congressman Joe Skeen of New Mexico. Other members of the research consortium are New Mexico State University, the University of Arizona, the University of California at Riverside, and the Los Alamos National Laboratory.

The research of the Southwest Consortium effectively complements the Plant Stress and Water Conservation Research Program at Lubbock. And it is recommended that the funding of the Southwest Consortium be continued at a level that will facilitate its further growth and development.

With respect to our testimony today, we respectfully request the Committee for fiscal year 1987 to increase the level of funding for the cooperative research program and Plant Stress and Water Conservation at Lubbock, Texas, now in its seventh year, in the amount of $1 million over the current budget allocation for FY 1986. This will bring total research program funding for FY '87 to $2,150,000.

We further request the Committee to authorize funding in the amount of $24 million to construct a proposed Plant Stress and

Water Conservation Laboratory as planned on the site made available for lease to the U.S. Department of Agriculture by the Board of Regents of Texas Tech University.

Information on the propose laboratory, including the architectural design drawing, may be obtained from the U.S. Department of Agriculture, Agricultural Research Service.

Mr. Chairman and Mrs. Smith, we appreciate very much the opportunity and your continuing interest in this extremely important and timely research program.

Thank you very much

Mr. **Whitten**. Thank you for your interesting presentation and your appearance.

Dr. **Curl**. Thank you very much.

Mrs. **Smith**. We appreciate that from our part of the country too. I come from a country where plant stress and water conservation is just as important as it is in Texas.

[Dr. Curl's full statement follows:]

Public Statement
Before the Appropriations Subcommittee on Agriculture, Rural Development and Related Agencies

On Behalf of

A Proposal in Support of the Continued Development of
A United States Department of Agriculture
Plant Stress and Water Conservation Research
Program and Construction of a Laboratory
At Texas Tech University
Lubbock, Texas

Presented by
Dr. Sam E. Curl
Dean
College of Agricultural Sciences
Texas Tech University
Lubbock, Texas

April 14, 1986
Washington, D.C.

The Honorable Jamie L. Whitten
Chairman, Appropriations Subcommittee on Agriculture, Rural
Development and Related Agencies and
Chairman, Committee on Appropriations
United States Congress

The Honorable Larry Combest
Congressman for the 19th Texas District
United States Congress

SUMMARY

USDA-ARS Plant Stress and Water Conservation Cooperative Research Funding and Construction Authorization for the Plant Stress and Water Conservation Laboratory in cooperation with Texas Tech University and the Texas Agricultural Experiment Station.

SUMMARY OF ACTIONS TO DATE

In fiscal year 1977, Congress appropriated $100,000 to initiate a feasibility study to determine the most appropriate size, program and location for the Plant Stress and Water Conservation Laboratory initially identified in Senate Document 59. That feasibility study was delivered to the Congress in March, 1978. In fiscal year 1979, Congress appropriated $800,000 to initiate planning for the research program and proposed facility in cooperation with Texas Tech University at Lubbock. In fiscal year 1983, Congress appropriated $500,000 to complete planning for Phase II and to finalize all plans and cost estimates needed for construction of the proposed laboratory. The research program plan, the facility program amendments and the architectural plans and specifications for Phase I of the laboratory have been completed. Plans and final estimates for construction costs for Phase II are near completion. A cooperative USDA-ARS research unit is in place in Lubbock occupying temporary space on the campus of Texas Tech University and at the Texas Agricultural Experiment Station site north of Lubbock. In fiscal year 1980, Congress appropriated $200,000 to initiate basic research. The Congress appropriated $400,000 for the research program for fiscal year 1981, $450,000 in fiscal year 1982, $750,000 in fiscal year 1983, $750,000 in fiscal year 1984, $900,000 in fiscal year 1985, and $1,150,000 in fiscal year 1986.

SPECIFIC ACTION REQUESTED OF THE COMMITTEE

It is proposed that Congress continue to recognize the urgency of the research indicated by appropriating funds at the level of $1,000,000 over the current budget allocation of $1,150,000 ($525,000 Base Funds plus $625,000 Formal Budget Funds) to this project to continue and strengthen the plant stress and water conservation research program. These funds are to be directed for cooperative research in plant stress and water conservation at Lubbock, Texas involving USDA-ARS, Texas Tech University and the Texas Agricultural Experiment Station. The funds will be used to increase the research effort and to provide a core of scientists which will form the base for a more comprehensive plant stress and water conservation laboratory which has been planned at Lubbock, Texas.

We further request the Congress to appropriate funding in the amount of $24,000,000 for construction of the Plant Stress and Water Conservation Laboratory. This laboratory would be constructed on a tract of land on the campus of Texas Tech University. The Board of Regents of Texas Tech University has authorized the lease of this land to the federal government for the purpose indicated. While recognizing the urgency for reduced federal spending, we believe the investment in this facility is one in which very visible and tangible benefits will be realized within a decade. The full thrust of the research program cannot be realized until the highly specialized facilities included in the laboratory are in place and ready for use by the scientists.

The proposed laboratory represents the most advanced architectural and engineering technology available and will be energy efficient and cost effective. An estimated savings of approximately $1,000,000 will be realized if the facility is fully funded in fiscal year 1987. This is not to mention the time saved in accelerating the full scale buildup to attack the urgent problem. The Plant Stress and Water Conservation Research Program at Lubbock is being recognized as a national Center for Excellence, and the program continues to grow. A technical relationship has now been established with the USDA-ARS Plant Gene Expression Center in California.

INTRODUCTION

Mr. Chairman, I greatly appreciate the opportunity to appear before the Committee today on behalf of needed agricultural research in the area of plant stress and water conservation. This vitally needed research is encompassed in the comprehensive nationwide research mission of the U. S. Department of Agriculture-Agricultural Research Service (USDA-ARS). An intensified research program will implement the recommendations of the Plant Stress and Soil Water Conservation feasibility study prepared by the USDA-ARS.

The background setting for the problem which the proposed research addresses is found in Senate Document 59, the feasibility study conducted by the Science and Education Administration of USDA in 1977, and the statement of Texas Tech University submitted for the record before this committee on March 26, 1979. We will not repeat this information, as we believe the record is replete with scientific and economic documentation which describes the conditions of the region and the research required to seek viable solutions to a complex set of critical problems confronting agriculture and natural resource conservation throughout the Great Plains, the semi-arid southwest and arid and semi-arid lands throughout the world. Water availability and quality continue to be limiting factors affecting the growth and cultivation of existing crop species. This underscores the urgent need for new varieties of drought resistant food and fiber crops for areas where non-rechargeable groundwater reserves are declining, energy costs are increasing, and natural precipitation--even though limited--could be used more efficiently.

The national thrust to seek out all viable strategies for conserving energy and water in agriculture has amplified the urgency to seek more energy- and water-efficient strains of plant materials and improved soil and water management practices. The need for a comprehensive, multidisciplinary, long-term basic science research program is obvious. Texas Tech University has taken the lead to work to develop a cooperative program with the U. S. Department of Agriculture-Agricultural Research Service, the Texas Agricultural Experiment Station, agricultural colleges and universities throughout the region, agricultural producers, the agribusiness industry and private research organizations.

BACKGROUND

The key planning events involving Texas Tech University which have taken place in conjunction with the development of the research program and laboratory to date are as follows:

1975-1976 Preliminary discussions with officials of the U. S. Department of Agriculture and members of the Congress.

1977-1978 Congress appropriated $100,000 for a feasibility study. The study team concluded that there was indeed an urgent need for a plant stress and water conservation research program and that Lubbock, Texas, was the ideal location for a laboratory facility. A later decision to locate the facility on the campus of Texas Tech University, in conjunction with the College of Agricultural Sciences, finalized the first major step in the development of the program.

1978-1979 Congress appropriated $800,000 for the preparation of a research program plan and architectural and engineering plans for the appropriate laboratory in which to carry out the proposed research. These plans have now been completed for Phase I. The structure will contain about 67,000 square feet of research space and will cost approximately $24,000,000 for construction. The facility contains space for twenty-two scientists, with accompanying greenhouses, headhouses, growth chambers and storage units.

The Science and Education Administration in August, 1979, transferred a USDA scientists (plant physiologist) to Lubbock, Texas, to serve as a cooperative scientists working with Texas Tech and Texas Agricultural Experiment Station scientists on environmental stress mechanisms in sorghum and cotton. Currently, Texas Tech is providing office and laboratory space for five USDA-ARS scientists who, together with Texas Tech scientists, are actively working in the research program. In addition, the University provides use of the library, computer and other University facilities as well as extending full faculty privileges to the USDA-ARS scientists.

1983-1984 Congress appropriated $500,000 for preparation of the architectural and engineering plans for Phase II of the laboratory, for review and finalization of all plans, and for development of final construction estimates. These plans are near completion.

1984-1985 Congress appropriated an additional $150,000 for support of the ongoing cooperative research program, bringing the total annual funding for the research program to $900,000 ($525,000 in Base Funds and $375,000 in Formal Budget Funds).

1985-1986 Congress appropriated an additional $250,000 for support of the ongoing cooperative research program, bringing the total annual funding for the research program to $1,150,000 ($525,000 in Base Funds and $625,000 in Formal Budget Funds).

Funding of the Cooperative Plant Stress and Water Conservation Research Program

	Base Funds	Formal Budget Funds	Congressional Add-on Funds	Total Funds
1980	$ -0-	$ -0-	$ 200,000	$ 200,000
1981	200,000	100,000	100,000	400,000
1982	400,000	50,000	-0-	450,000
1983	525,000	225,000	-0-	750,000
1984	525,000	225,000	-0-	750,000
1985	525,000	225,000	150,000	900,000
1986	525,000	375,000	250,000	1,150,000
REQUEST-1987	525,000	625,000	1,000,000	2,150,000

RESEARCH ACTIVITY TO DATE

Through fiscal year 1986, Congress has appropriated a total of $4,250,000 for cooperative research in plant stress and water conservation. Scientists from USDA-ARS, Texas Tech University, and the Texas Agricultural Experiment Station have initiated studies within the framework of the research program plan developed to guide the orderly, systematic and effective search for the information needed to solve the problems identified in this statement. The research team is making progress in better understanding the relative importance of various developmental and physiological responses of plants to soil water deficits and to atmospheric drought. A substantial amount of research has been initiated in the genetic improvement of grain sorghum and cotton. These crops can be grown in areas of limited rainfall. Research currently underway includes:

Soil-Root-Water Area: Research projects are designed to define the effect of the soil environment on rooting patterns (depth and root density) of sorghum and cotton as related to soil water extraction and water use efficiency. Soil environment is defined as a function of soil type, soil nutrient status and soil water status. These experiments should provide a definition of the ideal root system necessary to exploit the maximum soil volume with the least expense to the plant in terms of non-harvestable dry matter.

Soil-Plant-Atmosphere Area: Research projects are designed to delineate the major factors involved in determining photosynthesis: transpiration ratios of both sorghum and cotton. The role of the physical environment (evaporative demand and soil water supply) and the plant response (stomatal conductance to water and the photosynthetic rate) will be defined. The research is designed to identify the minimum level of leaf conductance necessary to support maximum photosynthetic activity in each specie under a wide range of soil water conditions.

Physiological Area: Experiments are designed to evaluate the utility of certain drought tolerance mechanisms. Of prime concern is osmotic adjustment resulting in turgor maintenance. The effect of increase osmotica on cellular metabolism is unknown, and will be defined with respect to chloroplast function. The major site of stress effects also will be defined as a function of source activity or sink activity. Important sinks include new leaf development, root development and fruit development. At present we do not know whether environmental stress affects the source directly or if the observed response is due to an indirect effect resulting from reduced sink activity. Prior to exploration of genetic variability and genetic manipulation it is essential to define the site of direct stress effects.

Results from the initial studies are extremely encouraging. This work has been conducted using existing Texas Tech University and Texas Agricultural Experiment Station space and facilities. This represents a substantial effort and demonstrates an extremely efficient use of the federal and state funds expended. Essentially every state in the Great Plains has devoted some scientific effort toward developing technology to conserve our water resources and utilize that water which is available more efficiently in crop production. However, due to the disaggregation of scientists, large environmental differences between research locations, and the diversity of plant responses elicited by water stress, there appear to be no major breakthroughs on the horizon. A unified research effort toward understanding and resolving the problem is necessary. To accomplish this effort, it will require additional funding, scientists and a highly specialized research facility.

With additional funds appropriated by the Congress, the cooperative research program developed by the U. S. Department of Agriculture-Agricultural Research Service, the College of Agricultural Sciences at Texas Tech University, and the Texas Agricultural Experiment Station will be fully developed.

MAJOR BENEFITS OF THE RESEARCH PROGRAM

1. Substantial reduction in the water and energy requirements for the production of quality food and fiber crops throughout the semi-arid southwest.

2. Development of germplasm of major grain and fiber crops which possesses superior resistance to adverse environmental conditions and yet maintains an inherent high yield potential.

3. Development of the basic principles essential for the design of soil and crop management systems to conserve and make available during the growing season greater amounts of precipitation and to enhance the production of more stress-tolerant plants.

4. Maintenance of a high level of agricultural production throughout the Southern Great Plains, thereby preventing (a) the collapse of an important, highly-developed agricultural region and (b) the attendant economic, social and environmental problems which would ensue.

5. A substantial contribution to the national effort to enhance the productivity of American agriculture, thereby increasing the availability of feed grain and natural fiber commodities for sale to foreign markets.

As water efficiency of the key commodity plants is increased through the research program, less irrigation water per unit of crop yield will be required. Each inch of natural precipitation captured and stored in the soil will be used more efficiently. By substantially reducing the need for irrigation water, fuel and labor costs associated with irrigation will be decreased. If the plants perform under dryland conditions at a higher level of efficiency, the farmer's net earnings, assuming reasonable commodity prices, should be favorable. It is projected that the research encompassed by this program would result in a minimum 15% increase in water use efficiency.

THE PROPOSED LABORATORY

The feasibility study conducted by USDA recommended that a major research effort consisting of a central laboratory and support facilities be located on the campus of Texas Tech University. Three primary research thrusts have been outlined for the Plant Stress and Water Conservation Research Laboratory with specific objectives defined for each thrust. These are as follows:

Thrust 1 Characterize the dynamics of the soil-plant-atmosphere continuum.

Thrust 2 Define environmental stress impact on growth, development and yield, and mechanisms which aid plants in tolerating or avoiding environmental stress.

Thrust 3 Define genetic control of stress mechanisms.

CONCLUSION

The research program and proposed laboratory will require a number of disciplinary teams in areas such as soil physics, soil chemistry, soil classification, plant physiology, plant breeding, agricultural engineering, and other allied areas requiring individual scientist input. This level of activity will allow effective and efficient research activity to focus on critical questions relating to problems of plant stress and water conservation. Because of the complexity of the proposed research, and the resources needed to solve these pressing problems, this program will be of long-term nature. The program is being recognized as a national Center of Excellence for basic plant stress and water conservation research in agriculture. With the development of the program, the University is in a position to invite private industry scientists and research support to join the activity. A technical relationship has been established with the USDA-ARS Plant Gene Expression Center in California.

Congress, in fiscal year 1977, appropriated $100,000 to initiate a feasibility study to determine the most appropriate size, program and location for the Plant Stress and Water Conservation Laboratory initially identified in Senate Document 59. That feasibility study was delivered to the Congress in March, 1978. In fiscal year 1979, Congress appropriated $800,000 to initiate planning for the research program and proposed facility in cooperation with Texas Tech University at Lubbock. In fiscal year 1983, Congress appropriated $500,000 to complete planning for Phase II and to finalize all plans and cost estimates needed for construction of the proposed laboratory. These plans are near completion. Near final architectural plans and specifications for the proposed laboratory have been delivered to the USDA-ARS. In fiscal years 1980, 1981, 1982, 1983, 1984, 1985, and 1986, Congress appropriated $200,000, $400,000, $450,000, $750,000, $750,000, $900,000, and $1,150,000, respectively, for cooperative research in plant stress and water conservation.

It is proposed that Congress continue to recognize the urgency of the research program by appropriating funds at the level of $1,000,000 over the current budget allocation of $1,150,000 ($525,000 Base Funds plus $625,000 Formal Budget Funds) for this project to continue and strengthen the cooperative plant stress and water conservation research program. This will bring the total research funding for FY 1987 to $2,150,000. It is further requested that the Congress appropriate $24,000,000 for the construction of the Plant Stress and Water Conservation Laboratory in fiscal year 1987 on the land provided by Texas Tech University.

Thank you Mr. Chairman, for your consideration of this proposal.

MONDAY, APRIL 14, 1986.

CHILDREN'S NUTRITION RESEARCH CENTER

WITNESS

HON. MICHAEL A. ANDREWS, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF TEXAS

DR. BUFORD NICHOLS, CHILDREN'S NUTRITION RESEARCH CENTER, BAYLOR COLLEGE OF MEDICINE

D. GAYLE MC NUTT, DIRECTOR OF COMMUNICATIONS, BAYLOR COLLEGE OF MEDICINE

Mr. **WHITTEN**. I see our friend and colleague Mr. Andrews is here. We will be glad to hear from you. We had just got a few minutes ahead of schedule, so we will be glad to hear from you at this time. And I will ask that your testimony precede that of Dr. Nichols.

Mr. **ANDREWS**. All right, thank you very much, Mr. Chairman. I am delighted to hear that at least one subcommittee moves ahead of schedule, instead of far behind it, like the ones that I serve on.

Mr. **WHITTEN**. We all run in circles now.

Mrs. **SMITH**. That is because we have such a good Chairman.

Mr. **WHITTEN**. Thank you very kindly.

Mr. **ANDREWS**. Well, we all know that, Mrs. Smith.

I am here today to speak about the Children's Nutrition Research Center that is part of the Baylor College of Medicine, and I know that you will have the opportunity to hear Gail McNutt and Buford Nichols, who are here in behalf of that facility.

In addition to my remarks, which I would like to precede theirs in the record, Majority Leader Jim Wright would also like a short statement, which I have, and I would like that inserted.

Mr. **WHITTEN**. We will have them both included in the record.

Mr. **ANDREWS**. Thank you.

I would like to say, Mr. Whitten, that having the Children's Nutrition Research Center in my district has been a real honor. I had the opportunity to go to the groundbreaking, and visit with the people who have started this wonderful center, at a time when it was only just something in the eye of Bob Casey when he served in this Congress, and many others, back in those early days, and the Texas Medical Center in the Houston area is the largest employer in Houston at the present time, the Anderson Hospital, Baylor College of Medicine, all those institutions are important to our economy.

But more importantly, facilities like Children's Nutrition Research Center are important to the world community at large. The research that will be done there in the coming decades and generations will save many young peoples' lives, and I am delighted that all of us are having an opportunity to participate, and seeing that wonderful work proceed.

I have been in Congress since 1983, and I really recognize that many difficult decisions that are going to be forced upon this Committee, and certainly that will be true in this Congress. There are two points that I think are important with regard to the increased appropriations, relative to this Center.

First, the Center is in its eighth year of operation, and it has been requesting funds for an expanded program to study the needs of pregnant women since 1980. Detailed plans have been made to implement this program at such time as the appropriations become available. I hope this Committee will give favorable consideration to the provision of an appropriation sufficient for this important work to continue.

Second, occupancy of the new facility is expected to occur during the fiscal year 1987, although I am sure that the Chairman knows how difficult it is predict the exact schedule of completion of the building, and we do not really know the exact timetable.

I request that we provide funds for an expansion of the program during fiscal year 1987 which will lead to the effective utilization of the facility, and eventual full development of the program. I would like to see the program fully established by 1990. That is a doable goal, and certainly a worthy one of this Congress.

I want to thank the Chairman for allowing me to say these brief remarks, and submit my longer written statement into the record, and I appreciate the witness letting me interrupt——

Mr. WHITTEN. We are glad to have your testimony in the record, and glad to know of your interest, which we realize.

Mr. ANDREWS. Thank you, Mr. Chairman.

Mr. WHITTEN. Thank you very much, these will appear in the proper order, as you understand, and thank you for your appearance.

[The statements of Congressmen Andrews and Wright follow:]

INTRODUCTION TO BE GIVEN BY CONGRESSMAN MIKE ANDREWS 25TH DISTRICT OF TEXAS

Mr. Whitten, I wish to introduce again this year my colleagues who are here to speak on behalf of the scientists of the Children's Nutrition Research Center and the administrators at Baylor College of Medicine. It was my pleasure to attend the Groundbreaking Ceremony on May 2, 1985 for the construction for the new Center. As you know, this subcommittee led in the securing of appropriations to construct the permanent facility for the Children's Nutrition Research Center, the only federal program which addresses the nutritional needs of mothers and their children. I am pleased to report that the U. S. Department of Agriculture personnel and the highly qualified Houston firms who have designed the building and are participating in its construction, are successful in implementing the mandate of this subcommittee. The building is well within the appropriated budget and is very nearly on schedule. The people involved with the design and construction of the building are hopeful that it will be available for occupancy in the summer of 1987.

Today I want to speak to you concerning the need for an increased appropriation for the operation of the Children's Nutrition Research Center in fiscal year 1987. I have been in the Congress since 1983 and have come to recognize that many difficult decisions are forced upon the appropriation subcommittees. I know that the subcommittee will give serious deliberation to the CNRC request. I would like to make two points in support of the increased appropriation. First, the Center is in its eighth year of operation and has been requesting funds for an expanded program to study the needs of the pregnant woman since 1980. Detailed plans have been made to implement this program at such time as the appropriations become available. I hope this committee will give favorable consideration to the provision of an appropriation sufficient for the establishment of this program in fiscal year 1987. Second, occupancy of the new facility is expected to occur during the fiscal year 1987, although I am sure that the Chairman knows how difficult it is to predict the exact schedule of completion of the building. I request that we provide funds for an expansion of the program during fiscal year 1987 which will lead to the effective utilization of the facility and eventual full development of the program. I would like to see the program fully established by 1990. In order to accomplish this objective, we need to move along with the program development in the next appropriation cycle.

Thank you very much for allowing me to introduce these friends and colleagues from my district.

INTRODUCTION TO BE GIVEN BY JIM WRIGHT, JR.
12TH DISTRICT OF TEXAS AND HOUSE MAJORITY LEADER

Mr. Chairman, I wish to commend to you the worthy goals and objectives of the Children's Nutrition Research Center and ask that all due consideration be given to our requests for increased appropriations to implement this federal program for which you and the United States Congress have worked so diligently. I am proud of the scientific productivity of the Center, and especially proud of the manner in which the investigators at the Center have worked to meet the goals and objectives as set forth by the U. S. Department of Agriculture. Looking to the future, I anticipate that the workers in our Center and other Human Nutrition Centers in the United States will bring to pass a marriage between agriculture production and health promotion which will contribute not only to the longevity, but also to the quality of life of the American people.

Once again, I wish to express my gratitude to you and to the subcommittee for the continuing leadership and guidance in the development of this Human Nutrition research program within the Department of Agriculture in cooperation with Baylor College of Medicine.

MONDAY, APRIL 14, 1986.

CHILDREN'S NUTRITION RESEARCH CENTER

WITNESSES

DR. BUFORD L. NICHOLS, JR., DIRECTOR, CHILDREN'S NUTRITION RESEARCH CENTER, BAYLOR COLLEGE OF MEDICINE

DR. D. GAYLE McNUTT, DIRECTOR OF COMMUNICATIONS, BAYLOR COLLEGE OF MEDICINE

Mr. WHITTEN. We will now hear from Mr. Buford L. Nichols and his associates.

Dr. NICHOLS. Well, I represent the Children's Nutrition Research Center, as you know, at Baylor College of Medicine. And this is Gayle McNutt, Director of Communications for the Medical College.

We are in the midst of construction of the permanent facility. Leadership was provided for that by your Committee.

I have got a couple of pictures here that show the current work under progress. The Phase 1 contract was let early last year, and we opened the bids on Phase 2 contract just last week.

In a way, I hate to be milking the back off the cow, but with the depressed economic situation in Houston, we came in nearly $10 million under the estimated cost for the completion of this building. So I can tell you, Mr. Whitten, we are well within the construction budget and pretty well on time.

Mr. WHITTEN. Mr. Reagan has indicated that he has some interest in this too.

Dr. NICHOLS. Yes. He has been a loyal backer, right.

The program is envisioned to continue development until the early 1990s. We can look back at the development of agricultural research in this country. In 1839, we had the beginning of scientific interest through the Patent Office. And then, of course, in 1863, President Lincoln opened the door for the Department of Agriculture. In 1894, this Committee put language in the appropriation for the—what they call the Extension Office to begin human nutrition research.

And we are descendants from that tradition and looking forward to expanding our work in human nutrition research.

The program we would like to address next is can we, through improving the diet, reduce the instance of low birth wright. It costs about $7 billion a year to take care of low birth weight babies. And if we could get a 10 percent reduction, I think that would be a significant improvement in the quality of life of the American people.

Mr. WHITTEN. I am sure you are familiar with the problems we have. We are going to do the very best we can.

Dr. NICHOLS. Yes, sir.

Mr. WHITTEN. But we do have a drastically reduced budget request before us overall. We think it is a mistake, and my recommendation, and I think the Subcommittee agrees, is that we try to go along at this year's level across the board.

To do that, we are going to have to make some adjustments between various activities. But anyway we are glad to have you here and glad to know of your progress.

Dr. **Nichols**. Well, thank you for allowing us to share a few moments with you.

Mr. **Whitten**. Yes, sir.

Dr. **Nichols**. Enjoyed the visit.

[Mr. Nichols' statement follows:]

Testimony to be given before the Subcommitte on Agriculture Rural Development and Related Agencies of the Appropriations Committee of the United States House of Representatives

Jamie L. Whitten, Chairman

at

2:30 P.M.

April 14, 1986

Testifying

Buford L. Nichols, Jr.

Director, Children's Nutrition Research Center

Baylor College of Medicine

D. Gayle McNutt

Director of Communications

Baylor College of Medicine

For further information, contact:
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Baylor College of Medicine
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(713) 799-4712

Revised 4/8/86

The Children's Nutrition Research Center is the nation's only facility dedicated to the scientific definition of the nutritional needs to ensure health in pregnant and lactating women, and in children from conception through adolescence.

The Center is operated by Baylor College of Medicine and Texas Children's Hospital in cooperation with the USDA's Agricultural Research Service.

Research is designed to support the goals of the Department of Agriculture by developing national standards to:

- Determine how the diet of a pregnant women affects her health and that of the child she delivers.
- Determine how the mother's nutrition affects lactation, the content of her milk, and the health of the child she nurses.
- Determine the relationship between nutrition and physical and mental development.
- Define dietary needs for healthy growth and development during childhood.
- Develop safe and effective methods for nutrition research.
- Define standards for the nutritional assessment of children, and pregnant and lactating women.

CURRENT ACTIVITIES

Five research programs supporting the Center's goals have been approved by the Council of Scientific Advisors (composed of nutrition scientists) and the Executive Committee (composed of government and institutional advisors).

These programs have been included in the Cooperative Agreement between Baylor College of Medicine and the Agricultural Research Service. Currently, research is being conducted in two programs and two laboratories.

Lactation Program

Studies in the Lactation Program concentrate on dietary needs of lactating women and on the special properties of human milk that promote the growth and development of the normal infant. Researchers have studied the nutrient compositions, physical properties, and immunological factors of human milk. Research also has been conducted on the quality and quantity of milk required for healthy growth in infants.

Studies on the relationship between nursing women and their infants have resulted in an education program for the USDA's Women, Infants and Children's (WIC) Program. Health care workers are now trained to assist new mothers who breast-feed their infants.

Weaning Program

The Weaning Program is providing solutions to problems that occur when foods other than breast milk are added to the infant diet. Initially, cereals are being studied. The ways in which foods affect the infant's digestive organs are also under investigation. Human milk appears to promote growth of these organs, while alternative foods do not.

Baby foods and formulas seem to cause illness in some infants. The results of these studies are designed to establish dietary recommendations for feeding infants during weaning.

Stable Isotope Laboratory

The Stable Isotope Laboratory makes it possible to do nutrient studies in normal infants and mothers. Stable isotopes are natural substances in foods that can be used as tracers to follow nutritional processes in the human body. Investigators in the Stable Isotope Laboratory have developed ways to determine the nutrients required to produce human milk. Methods for determining the lean body mass and the percent of body fat also are being developed. Studies to determine the body's use of different types of foods are being conducted using nutrients labeled with stable isotopes.

GROWTH LABORATORY

Research in the Growth Laboratory is focused on how the diet affects the development of the body. Standard and complex techniques are used for assessing body composition and its relationship to nutrition in infants, adolescents, and pregnant and lactating women.

REQUEST FOR ADDITIONAL APPROPRIATIONS

Pregnancy Program

The proposed Pregnancy Program is designed to study the nutritional needs of pregnant women and to determine how the diet affects the health of mothers and their children. The addition of this program will complete the Center's commitment to maternal and infant nutrition research from conception through infancy.

There has been a progressive fall in the infant mortality rate in the United States during the past 100 years. At the time of the founding of the U. S. Department of Agriculture in 1862, infant mortality averaged 150 to 1,000 live births. Today, infant mortality is less than 12 to 1000 live births. About two-thirds of the present infant mortality in the United States is due to low birthweight. Twelve nations have lower infant mortality rates than the United States because they have a lower incidence of low birthweight deliveries. The incidence of prematurity is 12% in the public hospital in Houston and 3.5% in the private hospitals. It is well-established that supplementary feeding programs during pregnancy reduce the incidence of low birthweight. The purpose of the Nutrition and Pregnancy Program is to address the ways in which an improved diet can reduce the number of low birthweight infants. Such a program would be cost-efficient. More than $5 billion a year is spent on hospital care for low birthweight infants in this country. A 10% reduction in the incidence of low birthweight infants will reduce costs to the taxpayers of one-half billion dollars. The research results necessary to launch a national program to prevent low birthweight are within the reach of the Children's Nutrition Research Center and within the mission of the U. S. Department of Agriculture.

THE BRAIN AND BEHAVIOR PROGRAM

The proposed Brain and Behavior Program will study the effect of the diet on mental development and performance in children. Preliminary data indicate that diet influences brain development and mental performance in infants and children. A reduction in the total mortality rate in the United States has resulted in a modification of the age distribution of the population toward the mature years. Emphasis has shifted from a focus on curative medicine to disease prevention and to the quality of life. There is no better way for the productivity of the American people to be secured than thorough research into the ways in which food improves the quality of life of our citizenship and results in a productive longevity.

BUDGET REQUEST FOR FISCAL YEAR 1987

The Children's Nutrition Research Center at Baylor College of Medicine, founded in November 1978, by the U. S. Department of Agriculture, currently has an annual budget of $4.2 million. The Center's $55 million permanent facility is under construction and could be available for occupancy in the summer of 1987. The appropriation request for Fiscal Year 1987 reflects the program development projected for the occupancy of this new building. An increased annual appropriation of $2 million for the Nutrition and Pregnancy Program, and $2 million for the Nutrition and Brain and Behavior Program are requested. With these two programs, the Center will have established four of the five programs authorized. The Center's move from rented facilities to the new building will require $1 million for facility operations.

The CNRC's research program is expected to be fully developed by 1990.

THE 1987 APPROPRIATION REQUEST:

Existing Budget	$4,200,000
Establishing Pregnancy Program	$2,000,000
Establishing Brain and Behavior Program	$2,000,000
New Facility Operation	$1,000,000
TOTAL REQUEST	$9,200,000

MONDAY, APRIL 14, 1986.

INTEGRATED PEST MANAGEMENT

WITNESS

MIKE WALLACE, EXECUTIVE DIRECTOR, TEXAS PEST MANAGEMENT ASSOCIATION

Mr. WHITTEN. Mr. Mike Wallace, Texas Pest Management Association is next. We are glad to have you here, Mr. Wallace. We will have your statement appear in the record, and have you touch on the highlights, if you will.

Mr. WALLACE. Thank you very much, Mr. Chairman.

My name is Mike Wallace, I am the Executive Director of the Texas Pest Management Association, a nonprofit producer organization in the State of Texas, which runs the Integrated Pest Management program. We represent over 1,000 producers of cotton, grain sorghum, wheat, peanuts, citrus, alfalfa, corn, soybeans and sunflowers. We have 21 producer units covering over 70 counties, and the acreage covered by our information dissemination is 10,125,000.

Agricultural producers in Texas use more than 21 million acres of land to produce these commodities, as well as pecans and rice. Cash receipts from the sale of these commodities exceed $3 billion each year. The management of insects, weeds, diseases and associated crop production practices represent major variable costs that limit profitability in Texas agriculture. Integrated Pest Management is a system that combines all crop production tactics, and has proven to be the most profitable and effective approach to pest control.

One of the major keys to the success of our IPM program is the availability of qualified specialists, provided through the Texas Agricultural Extension Service, to assist the producer in interpretation of the field crop situations. The producer relies on this technical expertise.

Crop protection has evolved actually from a purely chemical approach to one that integrates all possible control techniques, including the use of naturally-existing control agents. These management tools include cultural control practices, biological control, variety selection and the judicious use of pesticides.

The precise timing and execution of each IPM operation is critical in reducing crop injury. Presently, the use of economic thresholds and field scouting are major keys to the successful IPM program. IPM represents the most effective, the safest and the most profitable approach to crop protection.

As you know, the President's budget for fiscal year '87 proposes to eliminate all Smith-Lever Section 3(d) Integrated Pest Management Funds. The current fiscal year '86 Federal appropriation of $7.486 million supports Extension Integrated Pest Management programs in all 50 States, including Guam, Puerto Rico and the Virgin Islands. It is vital to Texas producers that level funding for fiscal year '86 proposed funding for IPM Smith-Lever Seciton 3(d) be restored to the budget for fiscal year '87.

Texas producers do pay their share of the IPM program. In 1985 Texas producers paid almost $400,000 in user fees for this program. In addition, the Texas Legislature appropriated almost $200,000 for IPM. We have already taken Gramm-Rudman cuts amounting to 4.9 percent, and as you are probably aware, the State of Texas currently has a $1.3 billion shortfall, and the Governor has issued an Executive Order for a 13 percent further reduction for each year of the biennium. As you can see, the State of Texas is not currently in a position to provide additional funding. Also, producers, under current economic conditions are not able to provide additional funding.

Integrated Pest Management does work. It provides a return on investment to the producer and to the environment. Just a couple of examples, in Rio Grande Valley producers realized a net reduction of eight insecticide applications and achieved a savings of $48 per acre.

In the El Paso area producers saved $750,000 and reduced fivefold the amount of insecticide required for pink bollworm control in 1985. These are just a few of the success stories.

Mr. Chairman, members of the Committee, Texas producers are paying their fair share of IPM funding. The State of Texas is paying their share, and we have taken our cuts, but we feel complete elimination of IPM funding under Smith-Lever Section 3(d) is unreasonable. We urge you to provide level funding for fiscal year '86 proposed funding for IPM for 1987.

Thank you.

[Statement of Mike Wallace follows:]

TESTIMONY ON SMITH-LEVER 3 (d)
INTEGRATED PEST MANAGEMENT
BEFORE
AGRICULTURE, RURAL DEVELOPMENT & RELATED AGENCIES
SUBCOMMITEE ON APPROPRIATIONS

April 14, 1986

Texas Pest Management Association
3411 University
Lubbock, Texas 79413
(806) 793-5795

Mr. Chairman, my name is Mike Wallace I am the Executive Director of the Texas Pest Management Association (TPMA), a non-profit producer organization in Texas which runs the Integrated Pest Management (IPM) program for the state. We represent over 1,000 producers of cotton, grain sorghum, wheat, peanuts, citrus, alfalfa, corn, soybeans and sunflowers. We also represent 12 commodity organizations in the state of Texas. We have 21 producer units covering over 70 counties. The information developed by the Extension Agents-Pest Management in each one of these pest management unit areas reaches over 8,400 producers. Acreage in the counties covered by this information dissemination is approximately 10,125,000. IPM information is reaching a substantial number of producers across the state.

Agricultural producers in Texas use more than 21 million acres of land to produce the above commodities as well as pecans and rice. Cash receipts from the sale of these commodities exceed $3 billion each year. The management of weeds, insects, diseases and associated crop production practices represent major variable costs that limit profitability in Texas agriculture. Integrated Pest Management, a system that combines all crop production tactics, has proven to be the most profitable and effective approach to pest control.

In Texas there is a highly coordinated effort in the implementation of the IPM concept between the producers, organized by TPMA, the 12 commodity organizations, the Texas A&M University System including the Texas Agricultural Extension Service and Agricultural Experiment Station, the Texas Department of Agriculture, USDA and various regional universities around the state. One of the major keys to the success of our IPM program is the availability of qualified specialists, provided through the Texas Agricultural Extension Service, to assist the producer in interpretation of the field crop situations. The producer relies on this technical expertise.

Successful crop production depends upon the effective control of all crop enemies-weeds, nematodes, insects and disease. Control of these crop pests has become increasingly difficult due to: energy considerations; pest resistance to many pesticides; concern for the environment; the need to preserve beneficial insects; and above all-the rapidly escalating costs of pest control.

Emphasis has been placed upon the IPM approach to crop protection-to control each pest in a way that will be most conducive to the control of other pests, maximize net profit, and simultaneously create no adverse effects on the crop or the environment.

Crop protection has evolved from a purely chemical approach to one that integrates all possible control techniques including the use of naturally-existing control agents. These management tools include cultural control practices, biological control, variety selection and the judicious use of pesticides.

The precise timing and execution of each IPM operation is critical in reducing crop injury. Presently, the use of economic thresholds and field scouting are major keys to a successful IPM program.

IPM represents the most effective, the safest and most profitable approach to crop protection.

Economic thresholds change throughout the season depending on commodity prices. These thresholds cannot be established in a research facility and be applicable for all areas of the state, nor applicable over a period of years. On-site technical assistance is a critical element in the success of any Integrated Pest Management effort. IPM is a management strategy that requires continuous adjustment with local technical expertise for success.

As you know the President's budget for FY87 proposes to eliminate all Smith-Lever Section 3(d) Integrated Pest Management Funds. The current FY86 federal appropriation, of $7.486 million supports Extension Integrated Pest Management programs in all 50 states and in Guam, Puerto Rico and the Virgin Islands. It is vital to Texas producers that level funding for IPM Smith-Lever Section 3(d) be restored to the budget for FY87.

Producers need assistance in proper pest identification and monitoring techniques. Producers need assistance in the selection, use and evaluation of pest management methods that are effective and enhance the potential for a positive economic return. Texas agriculture needs well trained pest scouts to monitor pest occurance throughout the state. Agricultural pest control chemicals need to be used appropriately to maintain their effectiveness and to reduce unnecessary environmental disruption and degradation.

With Smith-Lever Section 3(d) funding, the Texas Agricultural Extension Service teaches pest identification skills and pest management action thresholds. They provide the vital technical guidance and support for pest monitoring activities in more than 70 counties. They establish, in cooperation with TPMA, method and result demonstrations of IPM tactics for producer evaluation. The IPM extension agents teach the appropriate use of resistant plants, cultural practices, agricultural chemicals and biological agents to control pests. They also use a variety of publications, newsletters and mass media techniques to provide information on occurrence of pests and appropriate management techniques.

The major educational objectives of the Extension and TPMA IPM Programs are to enhance the economic stability of producers and improve environmental quality and agricultural production efficiency through the adoption of integrated pest management tactics and principles. Extension agents for pest management use result demonstrations, scouting and other method demonstrations, tours, field days, meetings, electronic media, newsletters, publications and computer communications to encourage the adoption of IPM practices.

Texas producers pay their share of the IPM program. In 1985 Texas producers paid almost $400,000 in user fees for this program. In addition, the Texas Legislature appropriated almost $200,000 for IPM. We have also already taken our share of cuts in Texas IPM. Gramm-Rudman 1986 cuts amounted to 4.3% and as you are probably aware, the state of Texas currently has a $1.3 billion dollar shortfall and the Governor has issued an Executive Order for a 13% further reduction for each year of the biennium. As you can see, the State of Texas is not currently in a position to provide additional funding. Also, producers, under current economic conditions are not able to provide additional funding.

Integrated Pest Management works! Integrated Pest Management provides a return on investment to the producer and to the environment.

* Extension and TPMA IPM programs encouraging delayed uniform planting to suppress the boll weevil in the Rolling Plains has reduced insecticide costs and increased net profits an estimated $3.4 to 5.5 million per year.

* Use of IPM in pecans resulted in an average reduction in fungicide cost of $64.20/acre.

* Peanut producers using IPM practices have increased yields and net returns by $95.00/acre.

* Wheat producers have increased yields 15-40% and recognized a 2.5 to 1 return on dollars invested.

* Soybean producers using IPM practices increased net returns by $20/acre.

* Rio Grande Valley producers realized a net reduction of eight insecticide applications and achieved a savings of $48.00/acre.

* IPM program activities in the El Paso area saved cotton producers $750,000 and reduced five fold, the amount of insecticide required for pink bollworm control in 1985.

- Wheat producers using infurrow applications of phosphate fertilizer can reduce wheat seed costs by up to $9.00/acre without reducing yield potential.

- Texas Blackland cotton producers using IPM practices increased yields an average of 137 lbs./acre and received $46.42 more in net returns/acre.

- An IPM program initiative in fertility management demonstrated a 72 and 90 pound lint yield increase or $36 and $45/acre in dryland and irrigated cotton using $18/acre of potassium input.

- A Coastal Plains cotton IPM program helped reduce insecticide costs by $3.22/acre.

Mr. Chairman, members of the Committee, Texas producers are paying their fair share of IPM funding, the state of Texas is paying their share. We have taken our cuts, but we feel complete elimination of IPM funding under Smith-Lever Section 3(d) is unreasonable. We urge you to provide level funding for IPM for FY87. Thank you.

Respectfully Submitted,

Mike Wallace

MONDAY, APRIL 14, 1986.

RESEARCH, EXTENSION AND TEACHING (CARET)

WITNESSES

ROY MEEK, CHAIRMAN OF CARET
DICK JOYCE, 1987 BUDGET LIAISON
CHIP MORGAN, SECRETARY OF CARET
BONNIE HAMMERSTEDT, 1988 BUDGET LIAISON

Mr. WHITTEN. We have next Mr. Roy Meek and his associates. We will be glad to hear from Mr. Meek at this time. Their full statements will appear in the record.

Mr. MEEK. Thank you, Mr. Chairman and members of the Committee.

My name is Roy Meek, Chairman of the Council for Agricultural Research, Extension and Teaching, more commonly known by the acronym "CARET." CARET is associated with the National Association of State Universities and Land Grant Colleges, and is a national organization of volunteer leaders representing farm operators, agribusiness, homemakers, youth, banking and other allied interests concerned with agricultural science and education.

Other CARET delegates with me today are Dick Joyce of Oregon, who has been our liaison with the Budget Committee, representing the Division of Food and Agriculture of the National Association. Mrs. Bonnie Hammerstedt of New Jersey will succeed Mr. Joyce in that position in 1988. Mr. Chip Morgan from Mississippi was to be with us, has not gotten here yet, and I am sure you know that he comes from Mississippi, and is our current Secretary of the CARET organization.

We are most grateful to you, Mr. Chairman, for providing us with the opportunity to appear before the Subcommittee to present our views concerning the Administration's 1987 budget recommendations for our Land Grant College programs in agricultural research, extension and teaching.

As volunteer lay leaders, we have been actively engaged as advisors, planners, and implementations of these programs. We have been its critics, enthusiastic supporters, and truly feel delight in that we have been thoroughly engaged in a democratic process in these programs of partnership from all levels of government.

On February 5th, when the Administration presented its 1987 budget recommendations to Congress, we were stunned by the unbelievable and disproportionate cuts of 59 percent for the Extension programs. This "burn-my-house-down spirt" reverberated throughout the Nations. As this news spread, thousands upon thousands of farmers, citizens throughout the country began to register their devastated feelings to their Congressional representatives, the White House, OMB and USDA. They just could not believe that the Federal partner could be so insensitive to the plight of American agriculture suffering its greatest financial stress since the Great Depression. The Nation's media provided further effective blasts in support of research and extension.

National farm organizations, commodity groups, and other allied groups supporting agriculture, also expressed their disapproval of the proposed budget cuts. The budget proposal of the Administration further recommended that Extension limit their services to farm operators until their needs have been fully met. This we believe will be ill conceived, and too narrow a definition for Extension to fulfill its obligations. Agriculture not only involves farmers, but agribusiness, lenders, lawyers, families and the entire scope of community relationships.

Just think what it would mean for our communities not to have program opportunities for rural and urban youth in 4-H Clubs. These are often the only opportunities for youth to enrich their lives. It would be a tragedy to discontinue such programs for our American youth.

Extension is actively engaged in programs designed to help farmers and families in financial stress. Recommended reductions would curtail this effort when they are most needed. Rural communities desperately trying to survive would be left with very little or no Extension assistance.

How do we put a dollar value on Extension consumer programs that help consumers plan family budgets, or teach proper nutrition and health to enable happier more healthful lives? How can we help convince families, who need our programs most, learn to get more from their resources to enhance their wellbeing? How can we continue to undergird the 2.9 million volunteer leaders who multiply Extension programs to reach more of our Nation's families? They are one of our country's most valuable resources, who freely give of their energies to help people help themselves. How can we help families prevent personal tragedies? These are far from frivolous expenditures of public moneys.

Today, our groundwater resources are being adversely affected by man's activities which are causing increased public concern with contamination. In the interest of correcting what will be far more serious in the near future, we strongly recommend the research and extension proposals to develop and implement coordinated interdisciplinary programs for agricultural producers, local governments, and the public.

We also ask that you continue a small investment in the Renewable Resource Extension programs which has increased economic potential for returns to privately owned forests and rangeland. The Integrated Pest Management programs are increasingly cost-effective to farmers and the agribusiness industry. The continuation of this program is targeted to special agricultural needs which offset further environmental impacts, improvements to water quality and greately reduced costs to farm producers.

Mr. Joyce, sitting nearby, said he saved $2,500 on spray costs on 20 acres of cherries last year, as a participant in the IPM program.

The shortages of highly trained scientists continue to threaten our technology related to food and fiber. We encourage your continued support for graduate fellowship programs, if we are to avoid serious shortages in replacement needs of personnel in the near future. It is difficult for us to realize that today's freshman in college will be our scientists at the turn of the century.

Frankly, we do not know of another government-sponsored research and education program that continuously returns 30 to 50 percent annually on its investment. It is a sound investment of public moneys, and has and will continue to benefit this Nation and its people.

After many sessions with our State and regional groups of volunteer leaders and supporting groups, we conclude that our Land Grant Colleges will not be able to respond to this society's expectations or discharge national responsibilities without substantially increased support over what has been proposed by the Administration. Nothing could be more devastating than to deny our farmers the very best technology available.

We are grateful for the economic and social improvements to farm families, rural communities and the Nation's welfare. A recent Washington Post article dubbed Extension efforts—"an example of government at its best, government that works." These programs have been and continue to be remarkable and responsive programs that have no bureaucratic hangups, no scandals, no history of misuse of government funds.

As users of these programs we join our Land Grant College Administrators in their deep concern with the unprecedented economic and social traumas of this decade affecting agriculture. If American agriculture is to return to its preeminence in the world, and be competitive, then it is imperative that scientific research and technology development be enhanced.

Many of the future gains for agriculture will not come from traditional sources of technology, but from promising investigations underway in biotechnology which demonstrate great promise in reducing production costs.

Farm operators will need to learn how to make technical adjustments now, and continue to make those adjustments with the help of our Extension Services. Economic adjustment is a continuous process for our agricultural sector, that is always downsizing itself as capital substituted for labor, and as labor and other inputs are made increasingly productive.

In a time of crisis, where economic survival is at stake, the first casualty is ideology. The second casualty appears to be Extension programs that are deferred, canceled or reduced. This will cause long-range adverse effects, and will multiply public costs in the future for both consumers and producers.

Currently, in this time of instability, the increased demands on research and extension have been magnified. These forces of instability have been felt by the lenders, suppliers, rural governments, schools and entire communities, and to a degree, our entire economy. In many areas of our country the farm financial crisis has resulted in reduced economic vitality, necessitating reductions in State and county budgets.

One of the bitter ironies of this economic trauma being visited on our agriculture is that the increased need of research and education from our Land Grant Colleges is occurring at a time when their capacity to respond is seriously limited because of restraints on Federal and State funding.

The problems of agriculture are far from resolved and adjustments have only begun to occur. Agriculture will be undergoing adjustments for several yeats to come.

Farm-food fiber in this country accounts for 20 percent of the gross national product, and 18 percent of our exports. Agribusiness is the single largest economic segment of our economy. Wjole three million are employed in farming, 22 million additional people are employed in associated jobs. Together it is a gigantic engine driving employment, foreign trade and production. As a Nation, we can ill afford to have agriculture lose its place as a dynamic economic force.

CARET has been actively engaged in the budget planning process, and unanimously supports the 1987 budget recommendations submitted by the Division of Agriculture of the National Association of State Universities and Land Grant Colleges. Our Land Grant Colleges respond to the challenges inherent in the many dimensions of the crisis and act in the best tradition of serviced people. We certainly hope you agree.

Therefore, Mr. Chairman, and members of the Committee, we ask that you carefully review these requests as important efforts to help answer the serious plight of American agriculture.

We thank you for this opportunity, and would——

Mr. Whitten. Well, we thank you for your statement.

And I agree with your statement, about the budget neglecting the necessities of agriculture.

Where the Department got the idea that we could not sell what we have and do not need, for what it would bring, I do not know. We set up the Commodity Credit Corporation to do just that. Farm income is price times volume, less costs. And if you study the overall picture, they are drying farmers up to where they are supplying only the domestic market. For years we used the CCC clearly for that purpose, to sell what we had, and did not need, in world trade for what it would bring.

Mr. Meek. Yes, sir.

Mr. Whitten. We are, according to the testimony, the only country in the world that doesn't follow that. And the Department is willing to do anything except lay it on the table, say "come get it for competitive prices." That is the only way you can sell in the market.

Mr. Butz did not use the Credit Commodity Corporation, he used the American corporations to sell. They made a commission of $396 million. That is a good investment, if we will retain our foreign markets, which is the biggest net dollar earner we have had. But everybody seems to accept the fact that we should use technology so as to reduce prices to world levels.

Mr. Meek. No, sir.

Mr. Whitten. But why some people will not buy that without looking into it, I do not know. During World War II, 49 percent of the consumer dollar went to industry and labor. Now they have got it up to 73 percent.

And how they can ask the farmer to take only 27 percent, and look to the Treasury for enough to cover his costs, I can't understand. I have pointed this out to the President twice.

We are financing our foreign policy at the expense of the farmer. During our embargo on shipments to Russia in 1980, we gave the market to our competitors. They paid the exporter's losses. But the farmer who produced it did not get anything.

Mr. Meek. No, sir.

Mr. **Whitten**. The PIK program cost us $17 billion, the cost charged to the farmer. What did we do, we gave away 11 percent of our production to other countries. We did not cut world supply.

How we are going to stop it, I do not know, with two and a half percent of our people on the farms. But just as sure as I am sitting here, it is going to pull down the economy, if we do not wake up to the fact that we are going to have to provide agriculture with fair prices. They are caretakers of our land. They are the biggest industry, the cheapest most economical supplier and the biggest single dollar earner in the world trade.

Why, we are buying $140 billion worth of stuff on credit that we could produce for ourselves. There are one hundred and twenty-five countries where we are selling guns, ammunition, planes and other war materials, while the people really need food and clothes. How do we rationalize that? How are you going to stop it?

This Committee has had to rearrange budget recommendations to try to take care of essentials. I hope we can again this year. But you are familiar with some of the problems that we have. We have a budget ceiling, we have Gramm-Rudman, plus a lack of understanding of the place that agriculture plays in the overall economy.

But we appreciate your statement, because when we go to the floor it is the testimony we have from people like you that we have to present to our colleagues.

Thank you very much for your appearance.

Mr. **Meek**. I guess the thing that we ask the most, Mr. Chairman, is that we continue to get the knowledge so that can work ourselves out of this mess that we have gotten into.

Mr. **Whitten**. Mrs. Smith?

Mrs. **Smith**. Well, thank you for being here. You should have been here the day that the Extension Service staff testified. We have never been so nice to anybody.

[Laughter.]

Mrs. **Smith**. I would suggest that you could see what good, good friends you have in this Committee.

Mr. **Meek**. Well, thank you.

Mrs. **Smith**. So we appreciate your being here, and I must say that your national officers get better looking all the time.

[Laughter.]

Mr. **Meek**. Thank you.

Mr. **Whitten**. Mr. Myers.

Mr. **Myers**. Mr. Chairman, I apologize to the witnesses for not being here during your entire testimony. I tried to split myself between two committees here, meeting this afternoon. We appreciate your testimony, particularly, Mr. Meek, when you spoke about the Administration's recommendation to cut the services the Extension Service now provides. We are all concerned about the budget, but some programs are more needed than others.

Today I met with Dr. Karin Craig from Purdue, and she told me of the work they are doing there, in carrying on Extension Service homemaking services. My wife was a home ec teacher many years ago. Now they are going into the field, actually taking the programs to the people such as computer uses, financial management, food and nutrition and stress management. She identified the people who had been attending their meetings, as they go out into the field, as a great many different people, not only farmers, but people who live in rural America. What a tremendous service that is and at the time it is really badly needed.

So, as the Chairman says, we are going to have difficulty finding the dollars, but I hope we can find them some place, to keep some of these very badly needed and very effective programs in rural America.

Mr. **Meek**. We appreciate that.

Mr. **Myers**. We appreciate your testimony.

Mr. **Meek**. Thank you.

Mr. **Myers**. I am going to miss her testimony tomorrow, she is a constituent of mine, she is from Purdue, I am going to have to miss it, we have a colleague of ours on Appropriations being buried, and a few of us have to go to New York for that.

Mr. **Meek**. Thank you, sir.

[Mr. Meek's full statement follows:]

Statement of Roy A. Meek, Chairman of the Council for Agriculture
Research, Extension and Teaching, before the House Subcommittee
on Agriculture, Rural Development and Related Agencies on Appropriations

April 14, 1986

Mr. Chairman, and members of the Committee. My name is Roy Meek, Chairman of the Council for Agricultural Research, Extension and Teaching more commonly known by the acronym "CARET". CARET is associated with the National Association of State Universities and Land Grant Colleges and is a national organization of volunteer leaders representing farm operators, agribusiness, homemakers, youth, banking and other allied interests concerned with agricultural science and education. Other CARET delegates with me today are Dick Joyce of Oregon who has been our liaison with the budget committee representing the Division of Food and Agriculture of the National Association. Mrs. Bonnie Hammerstedt of New Jersey will succeed Mr. Joyce in that position in 1988. Mr. Chip Morgan from Mississippi is our current secretary of CARET.

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As volunteer lay leaders, we have been actively engaged as advisors, planners, and implementations of these programs. We have been its critics, enthusiastic supporters and truly feel delight in that we have been thoroughly engaged in a democratic process in these programs of partnership from all levels of government.

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House, OMB and USDA officials. They just could not believe that the Federal Partner could be so insensitive to the plight of American agriculture suffering its greatest financial stress since the great depression. The nation's media provided further effective blasts in support of research and extension.

National farm organizations, commodity groups and other allied groups supporting agriculture also expressed their disapproval of proposed budget cuts.

The budget proposal of the administration further recommend that Extension limit their services to farm operators until their needs have been fully met. This we believe to be ill conceived and to narrow a definition for extension to fulfill its obligations. Agriculture not only involves farmers but agribusiness, lenders, lawyers, families and the entire scope of community relationships.

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How do we put a dollar value on Extension consumer programs that help consumers plan family budgets or teach proper nutrition and health to enable happier more healthful lives? How can we help convince families, who need our programs the most, learn to get more from their resources to enhance their well being. How can we continue to undergird 2.9 million volunteer leaders who multilpy Extension programs to reach more of our nations families. They are one of our coutries most valuable resources, who freely give of their energies to help people help themselves. How can we help families prevent personal tragedies? These are far from frivolous expenditures of public monies.

Today, our groundwater resources are being adversely affected by man's activities which are causing increased public concern with contamination. In the interest of correcting what will be far more serious in the near future, we strongly recommend the research and extension proposals to develop and implement coordinated interdisciplinary programs for agricultural producers, local governments, and the public. We also ask that you continue a small investment in the Renewable Resource Extension program which has increased economic potential for returns to privately owned forests and rangeland. The Integrated Pest Management programs are increasingly cost effective to farmers and the agribusiness industry. The continuation of this program is targeted to special agricultural needs which offset further environmental impacts, improvements to water quality and greatly reduced costs to farm producers. Mr. Joyce sitting nearby said he saved $2,500 on spray costs on 20 acres of cherries last year, as a participant in IPM program.

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We are grateful for the economic and social improvements to farm families, rural communities and the nation's welfare. A recent Washington Post article dubbed Extension efforts as -- "an example of government at its best, government that works". These programs have been and continue to be remarkable and responsive programs that have no bureaucratic hangups, no scandals, no history of misuse of government funds.

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One of the bitter ironies of this economic trauma being visited on agriculture is that the increased need of research and education from our land grant colleges is occurring at a time when their capacity to respond is seriously limited because of restraints on federal and state funding.

The problems of agriculture are far from resolved and adjustments have only begun to occur. Agriculture will be undergoing adjustments for several years to come.

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CARET has been actively engaged in the budget planning process and unanimously supports the 1987 budget recommendations submitted by the Division of Agriculture of the National Association of State Universities and Land Grant Colleges. Our land grant colleges respond to the challenges inherent in the many dimensions of the crisis and act in the best tradition of serviced people. We sincerely hope you agree.

Therefore, Mr. Chairman, and Members of the Committee, we ask that you carefully review these requests as important efforts to help answer the serious plight of American agriculture. We thank you for this opportunity. We would be happy to answer any questions.

MONDAY, APRIL 14, 1986.

RESEARCH AND EXTENSION PROGRAMS

WITNESSES

DR. JIM OZBUN, CHAIRMAN, FY 1987 BUDGET COMMITTEE, DEAN, COLLEGE OF AGRICULTURE & HOME ECONOMICS, WASHINGTON STATE UNIVERSITY

DR. ROBERT CROM, IOWA STATE UNIVERSITY, EXTENSION

DR. PETE DEWHIRST, UNIVERSITY OF ARIZONA, EXPERIMENT STATIONS

DR. LAWRENCE CARTER, FLORIDA A&T, 1890 EXTENSION

DR. JOAN McFADDEN, AMERICAN HOME ECONOMICS ASSOCIATION

Mr. WHITTEN. Our next witness is Dr. Jim Ozbun.

Doctor, we are glad to have you. You may present the others with you.

Dr. OZBUN. Yes, I will do that.

Mr. Chairman, Mrs. Smith, the rest of the Committee, we are delighted to have an opportunity to present our testimony to you today.

My name is Jim Ozbun. I am Dean of the College of Agriculture and Home Economics at Washington State University, and I am here as Chair of the Budget Committee, 1987 Budget Committee for Agricultural Science and Education. We are here, really, on behalf of the Division of Agriculture and the National Association of State Universities and Land-Grant Colleges.

We appreciate the opportunity to be here, and we wish that the circumstances could be a bit more positive, because it is our opinion, at least, that the proposed Administration budget for agricultural science and education is shortsighted and, in fact, counterproductive.

Mr Chairman, with me today I have several members of the 1987 Budget Committee, and I will introduce them quickly. They are the experts in the area and, indeed, will be prepared to respond to questions that you might have for them.

I have Dr. Robert Crom here from Iowa State University, representing Extension; Pete Dewhirst from the University of Arizona, representing Research; Dr Lawrence Carter, from Florida A&T, representing 1890 Extension; and I have Joan McFadden from the Home Economics Association here today. So we are pleased to be able to address you and deal with the issues.

Each of the members of the Committee have filed written testimony, and that is available to all of you. In addition, we have provided you with a comprehensive document that relates to the budget and a summary statement, so that you have that information.

I will not dwell on the details of that budget request and the dollar amounts and so on, but rather would like to talk about the importance of the systems and the implications of the proposed budget reductions.

Our recommendation and discussion are an attempt to talk about the capacity and maintaining that capacity of our Extension, Experiment Stations and our colleges of agriculture to deal with the crises that are facing agriculture in rural America today. We want to make sure that agriculture regains its economic viability, which we think is a fundamental national need.

The recommended funding of the base programs that we are coming forward with—base programs being Hatch, Smith-Lever, McIntire Stennis, Animal Health Research Section 1433, and the 1890 research and extension programs—we are recommending a five percent increase in those programs over the 1985 base. This, we feel, is not really an increase in terms of program activities, but really is a current services level funding for these activities.

Further, we are requesting restoration of funding for the national special grant research programs, Extension 3(d) items and the Graduate Fellowship program that was established. We believe that this initial effort in this area is rebuilding the human capital needs for agriculture at the present time.

Finally, we would ask for special supplemental funding for three areas: Farm Financial Management, which is really Ag Competitiveness; Enhanced Nutrition Education; and Water Quality and Management. We think that those are national priority areas that we would like to see some supplemental funding for.

Details of all of these have been shared with you in written material.

Clearly, it is not necessary for us to list the problems facing farmers, their families and communities at this time. You are aware of these issues probably as well as we are. Our concern, however, is the fact that the proposed budget reductions fail to address these problems, the proposed budget of the Administration fails to address these problems, and seriously compromises the capacity of the land-grant universities to deal with the problems facing agriculture today.

Rural America has been shortchanged by a number of Federal programs, and the cumulative sum of this can be documented by the tragedies that we see in rural America.

Extension is the sole institution available in all counties for dealing with these kinds of issues. And, in fact, many imaginative and pro-active programs have been established cooperative with other state and Federal agencies than just farmers. Rural bankers and businessmen and their families are impacted by the crisis that we have in agriculture today as well, in the last few years. A national forum sponsored by the National Institute of Mental Health and The Council of State Governments had a forum on this, "Personal Stress Problems of Farmers and Rural Americans." This highlighted some of the successes of the efforts of our extension program in other areas in dealing with those problems. But on the other hand, it emphasized the fact that the resources available were certainly inadequate to deal with the magnitude of the problems that we have.

It outlined the fact that teen suicides in rural America are double that of the rest of the country. I think that that is something that we should all be concerned about. The displaced farmers, even after three or four years in many cases, had not been able to make the adjustments that were necessary to get them back into a productive society.

We think that the proposed budget really was not very sensitive in terms of dealing with those kinds of issues. And, in fact, it was ill-advised in proposing that the extension program be limited to production agriculture. That really would not deal with the kinds of problems that we have alone in our rural America.

I should also point out that the problems are broader than just farmers. Rural bankers and businessmen and their families are impacted by the crisis that we have in agriculture today as well.

In dealing with these particular crises, we must at the same time look ahead to the other problems that are facing agriculture and rural America today. We must be concerned about providing technology that will enable our producers to be competitive on national and international markets.

We must be concerned about these markets so that if the markets are adjusted and we have the research and technology and educational systems to help all producers interact and deal with those market situations.

We think that the proposed reduction and elimination of the agriculture program, for example, is counterproductive if we look at what the market situation is really going to be. We project ahead the next decade fish will be the largest new product consumption. It will have the largest increase in consumption of any product that we can look at, and yet agriculture is being eliminated from the budget. Our seas are not adequate to handle those kinds of problems. We need to have fish farming agriculture if we are going to be able to deal with that.

And certainly the Mississippi catfish project is an excellent example of the kinds of things that can happen if you have the technology and the educational programs available to our producers.

The proposed cuts would not allow us to deal with some of the high priority areas facing agriculture in our society today, such as water quality, water management, or the safe use of pesticides. These are serious problems facing our nation and need increased programs and efforts rather than reductions as we are presently being faced with.

Mr. Chairman, we think that the land-grant universities, the state/Federal relationship that we have established is not the problem, but rather the solution to that problem. We think that there is no good time for reductions, certainly, but the timing for this proposed reduction is particularly ill-timed. The states are not in a position where they can pick up the cost of these programs. Markets for agricultural products, forestry products, petroleum, mineral products, are all on the decline, and so our states are stressed as well.

We are not making these budgets without regard for the fiscal situation that faces our nation, but rather we think that it in the long-term best interests of our nation to deal with agriculture, deal with agricultural education and science in a positive way rather than the proposed budget reductions.

We thank you for this opportunity to present our testimony. I personally want to thank you, Chairman Whitten, Mrs. Smith, and the rest of the Committee, for your very enlightened leadership when it comes to agriculture and the efforts that you have made to keep our programs funded and off and running.

Thank you very much.

Mr. WHITTEN. Thank you very much, Doctor.

I do not believe any group in Congress has more interest in your programs than this Subcommittee. I have always said we have to keep a balance between agriculture, industry and labor.

We all recognize that if labor was unemployed we would have a depression; if industry went bankrupt, we would have a depression. But many do not seem to realize that agriculture is bigger than all of them, and if it goes under, they cannot see what it would do. It is just hard to understand.

As Chairman of the Committee, I submit a report to the Budget Committee each year. Last year I submitted it, and the recommendations of the Office of Budget and Management were to cut domestic programs some 28-and-a-fraction percent. But it did not go to the deficit; it provided a 36 percent increase in funds for other activities, primarily an increase in the carryover for military spending and foreign aid.

I spoke to the National Association of Soil Conservation Districts today, and I told them that Agricultural Conservation Program does a great job and a very necessary job, but the landowner pays 75 percent of the cost. And if they have no landowners, since they owe everything they have for taxes and cannot pay their debts, SCS has got nothing to do. Everybody is busy saving the Farm Credit System. But why do you need the system? If farmers have lost title to their farms, they do not need a manager.

So it is with the Extension Service. We all need to get together to look after agriculture and help the farmer, so he can support the rest of us.

Now, listen to this. This is unbelievable. This year's budget calls for the following programs to be eliminated: Agricultural Conservation Program, $190 million; Watershed and Flood Prevention, $223 million; Great Plains Conservation Program, $21 million; Water Bank Program, $9 million; Forestry Incentive Program, $12 million; Resource Conservation and Development, $26 million; River Basin Surveys, $14 million; all rural housing loans, $2,112,000,000; all rural development loans, $540 million; all rural grants, $169 million; Farm Ownership Loans, and Emergency Loans, $1,220,000,000; Special Research Grants, $29 million; Animal Health grants; $5 million; Expanded Food and Nutrition Programs, $60 million; and it goes on down the line for a total of $4,700,000,000. That is about half of what goes for agricultural programs if you look to agriculture proper, without all the food programs. Some years ago somebody wanted to take all the food programs out of this bill, and I said, "How in the world will you pass it?" I said, well, New York City has got 21 members and California has got 45 members. How else would you get their votes?

These are programs that appeal to consumer groups. I get an award every once in a while in Los Angeles, California, for restoring the city gardening .

City gardening is a big thing with these cities, and they come in here and want to know what we are going to do. And it is unbelievable the attention that a little plot of ground gets, and city people go out there. And may I say that two or three years ago we said, with all the problems we have, nobody has bothered anybody's little garden plot out there. The folks who deal with that are interested in that, since they do not have other things.

Now, the point is that we all had better get busy and pull together. Why in the world should we buy overseas on credit what we can provide for ourselves.

I have mentioned this earlier. You probably heard it.

Dr. **Ozbun**. Yes.

Mr. **Whitten**. But the PIK program cost us $17 billion—charged to American agriculture. What they did was just take 11 percent of our production away from us. The farmer should not be charged at all. He gave up 11 percent of his foreign markets. And if you followed this year's recommendation, we would be dried up only to supplying the domestic market in a very short time.

So we are for what you represent. Your organization is fine and, if you are part of it, you ought to take care of it. But in the background we all had better take care of the farmer, or there will not be any need for any of us.

Dr. **Ozbun**. We would agree.

Mr. **Whitten**. We appreciate your appearance.

Dr. **Ozbun**. Mr. Chairman, we would be happy to try to respond to questions that any member of the Committee might have.

Mr. **Whitten**. Mrs. Smith.

Mrs. **Smith**. I have no questions, but I certainly do appreciate your coming in and making such a fine statement. We are all with you.

Dr. **Ozbun**. Thank you.

Mr. **Whitten**. Mr. Myers.

Mr. **Myers**. Mr. Chairman, we are all concerned, of course, about research because that is one of the ways we can find more usage for agricultural products, The transfer of responsibility, that the Administration's budget is recommending, here back to more state responsibility, how soon could that be accomplished, or ever?

Dr. **Ozbun**. Well, I can comment on that briefly and maybe some of the other Committee members would as well.

As I indicated in my statement, the states at the present time are not in a very good position to come in and cover in behind the Federal reductions that you are proposing. Obviously, I suppose, over time, some states might be in a position to do that, but certainly that would not be in the short run.

I think that question brings up a more critical issue, and that is of equity of information The land-grant university system was established originally to provide equal access for information across state lines. If each state were to become independent and run their own research and extension programs, then we lose the opportunity for sharing that information across the nation. That, I think, would be seriously damaging to our whole country.

Mr. **Myers**. You read my mind. That was going to be my next question.

The concept, of course, of the Cooperative Extension Service was to do this, was it not, a sharing of information?

Dr. **Ozbun**. That is exactly correct.

Mr. **Myers**. Anyone else want to comment on that?

Dr. **Carter**. I would like to just comment on that. I represent the historical land-grant institutions, and one hundred percent of our extension is Federal. And so virtually that would wipe out our total programs in the southern states.

Mr. Whitten. May I say that this Committee is trying to be very cooperative. The 1890 colleges for a long time lagged behind the other colleges in the field of research and many other things. We told Dr. Morrison, who headed the organization at that time, at least was one of the leaders, that we realized that some of the faculty and other folks lacked the preparation needed back then. We arranged with him that we would go along with him on increases as fast as he was able to increase the quality of his faculty. This is still an agreement. And we have tried to bring the 1890 colleges up to the average. And I think all hands have been working on that.

What would be the effect of the budget requests here? What would be the effect on 1890 colleges as far as efforts to catch up—and they are catching up rapidly?

Dr. Carter. We appreciate that, Chairman Whitten. For the past few years, we have gotten substantial increases to carry out our programs, but if you are getting a hundred percent Federal funds and you wipe out 60 percent and it takes you a year to dismantle people, you are talking about 70, 75 percent. And then I will have to close the door at my institution.

And so most of the institutions do not get any state support, virtually a low kind of support to operate those programs. So we do not try to operate separate programs. We work with 1,862 institutions to try to conduct programs for all people within the state. It is our particular mission to work with limited resource, small farm and farm families to deliver information to them.

So it gets to be a drastic impact on the southern states where most of the 1890 institutions conduct the extension program. It will not only affect us; it will affect the 1,862 counterparts as well where we have joint programs.

Mr. Whitten. The reason I ask is that this Committee, without exception, has been cooperative in trying to enable them to catch up for a variety of reasons.

Dr. Carter. Right.

Mr. Whitten. I am one of those that recognized from the start that everybody has their own institutions, everybody has their own obligations, and we all have to pull together.

Dr. Carter. Sure.

Mr. Whitten. This Committee, through the years, has tried to go as fast as circumstances warranted.

Dr. Carter. Right. We appreciate that very much.

Mr. Whitten. Mr. Myers.

Mr. Myers. Dr. Ozbun, in your testimony you said that for every dollar that the Federal government put in it generated an additional four dollars back home. Is that on all programs or is that just——

Dr. Ozbun. If you take the total system, particularly that is true for the research program. For every dollar that the Federal government puts in, there is four dollars generated, on the average, in the states.

Mr. Myers. We constantly are concerned about benefit to cost, and that is a pretty good return then, is it not?

Dr. Ozbun. That sure is. It sure is.

And then the return on the investment in agricultural research, in the first place, is another 30 to 70 percent, depending on the particular commodity that you are working with.

Mr. MYERS. Well, if we look at huge surpluses, particularly in the grains today' if we can find additional use for that. Dr. Craig is at the table now, and I did not realize that she was going to appear today. I apologize for not being here tomorrow. Take good care of her tomorrow, now, you folks who are going to be here.

She mentioned that today, and we ran across that, of course, years ago when we had Carol Forman and she did not want you to eat pork, particularly bacon and ham, because it might do damage to you. People are probably going to eat less red meat today, so we need to find some use for that grain besides putting it through a cow or a pig. I still eat it, but——

Dr. CARTER. We have goats in Florida.

Mr. MYERS. You can keep them there, too. [Laughter.]

Dr. CROM. Chairman Whitten, I might respond to the Congressman's question about state capacity to pick this up.

As I communicate with my counterparts, I think it is fair to say there are some 15 to 20 states at the moment that are in the situation where they are having to retrench and suffer aversions or worse, somewhere between four to 20 percent. I think Congressman Whitten's state may be one of those, and mine is one of those. And I think there is no way that either the state or the county funds could pick up that portion of the Federal that is being proposed to be dropped in the President's budget.

Mr. WHITTEN. You are right about my state being caught in this. I point it out many times. During the Articles of Confederation, you had each State taking care of itself. Of course, you had a hopeless situation in this country.

The word "united" is in the name of our country because we did unite. Just about everything we are proud of in most of the rural areas of this country have been Federal programs. And why not?

When I first came here, you could ship finished goods south much cheaper than you could from south to north. You could send gravel and logs from the south to the north much cheaper than you could from the north to the south. The first thing I tried to master was discriminatory freight rates. Well, about the time the Congress was ready to act, I think the courts acted.

But this is a big country, and the problems of one area are not the problems in the other. There is no telling where people will work or where they will move to. So I have been trying since I have been here to work on a national basis.

I have mentioned it several times. I voted for the New York City loan guarantee. This is the biggest city we have. We are trying to prove to the Russians that our system will work, and I told them that all these debts they owed, they owed to my folks and the rest of the country. I voted for the Chrysler loan guarantee because if you had a big corporation to go under, it would spread to other areas as happened in the last depression. So we have got to, in the position that we are in, look after the country, not just your own area. We must listen to the member from each district, because no one else knows the problems of the local districts better than the man who represents them. But we have the job of putting it together, and we are going to try to do.

We have done a pretty good job of keeping things balanced, but we have had to transfer where the budget had what we considered surplus money over to where they wanted to make unfortunate cuts. We face that in this 1987 budget, but in the overall, we have got to stay within the budget, which we have done, and we have got to deal with Gramm-Rudman.

I just want you to know we try, and I am urging you to help other farm organizations to look after the farmer's interests. If you do not help farmer's income, we cannot in the long run take care of all of our people.

Thank you very much.

Dr. OZBUN. Thank you. We appreciate it.

[The full statements of Dr. Ozbun and his panel follow:]

STATEMENT OF THE
DIVISION OF AGRICULTURE
NATIONAL ASSOCIATION OF STATE UNIVERSITIES AND LAND-GRANT COLLEGES

Presented by
Dr. Jim Ozbun, Chairman
FY'87 Budget Committee
Dean, College of Agriculture & Home Economics
Washington State University

to the

House Appropriations Subcommittee
for Agriculture and Related Agencies

April 14, 1986

Mr. Chairman and members of the Subcommittee, on behalf of the Division of Agriculture of the National Association of State Universities and Land-Grant Colleges, I wish to express our appreciation for the opportunity to present testimony to your subcommittee on the FY 1987 Agricultural Science and Education Budget. I wish the circumstances were more positive. However, we view the Administration's budget proposal for agricultural scince and education to be short sighted and in fact counter productive.

Mr. Chairman, with me today are several members of our FY 1987 Budget Committee. Several of them have provided brief statements on their respective program areas for the record. However, they are our experts who will respond to any specific questions the committee may have. They are:

Dr. Donald Hegwood, University of Maryland,
Resident Instruction;

Dr. Robert Crom, Iowa State University,
Extension

Dr. Pete Dewhirst, University of Arizona,
Experiment Stations

Dr. Lawrence Carter, Florida A&T,
1890 Extension

Dr. Mortimer Neufville, University of Maryland-Eastern Shore,
1890 Research

Dr. Arnett Mace, University of Florida,
Forestry

Dr. Joan McFadden, American Home Economics Association

In addition, we have provided each of you with a comprehensive statement of our FY 1987 budget recommendations along with a summary. We believe these materials are self explanatory. Therefore, I do not plan to dwell on the dollar amounts beyond a very quick review. Rather, I want to briefly discuss the importance of the agricultural research, extension and teaching system to the nation and the dangerous implications of the proposed budget.

The essence of our recommendations is to maintain the response and service capacity of Extension, Experiment Stations and our colleges of agriculture to meet the crisis in Agriculture and Rural America. Further, we believe our recommendations are imperative for our system to effectively assist agriculture to regain its economic viability in the future -- a fundamental national need.

To this end, we recommend funding for the base programs -- Hatch, Smith-Lever, McIntire Stennis, Animal Health Research section 1433, and 1890 research and extension programs -- be set at five percent above the FY 1985 level. In real terms, this is not an increase but a minimum maintence level for critical programs that are funded well below actual need levels.

We further request restoration of the national special grant research programs, the Extension 3(d) items and the Graduate Fellowship program which is beginning to bear very positive results in rebuilding our needed human capital base for agricultural sciences.

Finally, we recommend three key areas for special supplemental funding including:

* Farm Financial Management/Agricultural Competiveness

* Enhanced Nutrition Education

* Water Quality and Management

The details of these recommendation are in the materials we have shared with you.

Clearly, you do not need a listing of the problems of farmers, their families, or of rural communities. You know these issues too well. Our greatest concern is the budget proposal not only fails to address the problems it would seriously compromise the land grant system's capacity to deal with the crisis.

Rural America has been short changed in nearly every Federal program. The cumulative effect of this neglect is being documented by the mounting personal tragedies in rural communities. A major reason for the problem beyond simple funding issues is the isolation and wide dispersion of rural people.

Extension is the sole institution available in every rural county -- however, our resources are inadequate to provide the myrid of services needed. Nonetheless, over the past three or four years, many imaginative and proactive programs have been initiated by Extension in cooperation with other State and Federal agencies to treat the personal & financial stress problems as well as provide relocation and retraining assistance to the displaced farmers. A special forum sponsored jointly by the National Institute of Mental Health and The Council of State Governments on "Personal Stress Problems of Farmers and Rural Americans" documented many successes for these joint efforts of Extension with other agencies and organizations. Unfortunately, it also documented the fact that the problems far exceed our current capacity to deal with them.

Two simple examples of the human problem reflect the need. Teen suicide attempt rates in Rural America are running over two times national average. A significant share of our "displaced" farmers and their families have made no constructive adjustments even after three or four years.

The insensitivity of the proposed cuts to Extension and the ill advised language to limit extension to production agriculture ignore this real crisis. I would note the problem is not just a farmer problem. Rural Bankers and businessmen and their families are in the throes of exactly the same situation.

Even as we respond to the crisis, we must look forward. Better cost reducing technologies are imperative for the re-establishment of agricultural viability. Changing markets for agriculture requires research and educational help for our producers if they are to respond.

One example of the inconsistentcy of the budget proposal with market realities is the elimination of aquaculture research. A recent projection of changing food consumption patterns projected the largest per capita food consumption growth over the next decade will be for fish. Our seas cannot meet the demand but "farmers" could if given the basic scientific and technical support needed to respond. The Mississippi catfish industry is a sterling example of the possibilities of meeting new markets and broadening the economic base of agriculture. The budget proposal would negate the opportunity.

The proposed cuts will also reduce the capacity of our system to serve important national objectives such as water quality, safe pesticide use, and soil conservation. Existing problems and pending legislation demand enhanced programs in these areas, not curtailed efforts. Failure to carefully husband our natural resources today can only mean greater costs and problems in the future.

Mr. Chairman and members of the committee, the unique Federal/State Agricultural science and education system is not part of the problem -- it is part of the ultimate solution. Failure to support the system at any time is not advisable, however; the current proposed cuts could not have worse timing. Our national needs in agriculture and natural resources are overwhelming. Further, the capacity of our states and local communities to pick up the Federal share is at a low ebb. The demise of markets for agriculture, forestry, mining and petroleum are decimating the majority of our states and pushing many local communities to the brink of economic disaster. Our recommendations to you are not with disregard for national fiscal problems, but rather with full cognizance of the longer term needs of our nation.

We thank you again for this opportunity to express our concerns with the proposed budget for agricultural science and education. In addition I would like to personally thank you Chairman Whitten and Mrs. Smith as ranking member and all members of this subcommittee for your enlightened leadership in the support of agriculture. We will be happy to respond to any questions that you have.

In Support of FY 87 Food and Agriculture Research Budget

Mort H. Neufville

1890 Institutions Representative

Mr. Chairman, I am Mortimer H. Neufville, Dean and Research Director, University of Maryland - Eastern Shore. I thank you for the opportunity to appear before this distinguished committee and formally represent the 1890 Land-Grant Colleges and Universities. The efforts of this committee has made the 1890 institutions an integral part of America's highly successful agricultural research system. This nation's wide research effort has helped to develop the most efficient and productive agricultural enterprise in the world. The 1890 universities support the FY 87 Budget request of the National Association of State Universities and Land-Grant Colleges. Also, we support the concept of Special Grants in the CSRS budget. We firmly believe that the nation's future is dependent on its ability to maintain its competitive edge in food production. An effective food production system may help in guaranteeing the nation's national security. This competitive edge is however driven by a strong research effort capable of making new discoveries toward conserving our natural resources, increasing productivity, restoring farm profit and improving the integrity and well-being of the family.

The 1890 institutions have effectively targeted their programs to appropriately match their functions and location while, contributing to the scientific knowledge base and development of scientific expertise.

The 1890 institutions are working on ways to increase the productivity and profitability of animal production systems concentrating on minor livestock species which are well suited for small farm operations. 1890 scientists have developed improved production methods for horticultural crops while others are attempting to improve the yield and nitrogen fixing efficiency of legume crops. Through the efforts of these scientists, fish farming has also developed into a profitable farm enterprise in the South. Results from 1890 research on animal and insect communities of salt marsh estuary systems will be of great value in plans to utilize these areas for commercial fish, crab and shrimp production.

Most 1890 Universities conduct research on problems and opportunities confronting limited resource farmers and rural populations. Results and progress reports have shown that these universities are helping people and families improve their dietary intake, overcome poverty and lead productive lives.

We support a restorative budget and one which would include an increase to upgrade our scientific expertise, restore profit to the U.S. food and fiber producers and maintain family integrity and well being.

STATEMENT OF THE EXTENSION COMMITTEE ON ORGANIZATION AND POLICY OF THE NATIONAL ASSOCIATION OF STATE UNIVERSITIES AND LAND-GRANT COLLEGES PRESENTED TO THE HOUSE APPROPRIATIONS SUBCOMMITTEE ON AGRICULTURE AND NATURAL RESOURCES

APRIL 14, 1986

Presented by Dr. Robert L. Crom, Director,
Cooperative Extension Service and
Dean, University Extension
Iowa State University

For seventy-two years the Cooperative Extension Service has been an effective federal, state, and county partnership. Its basic objective has been to improve U.S. agriculture, to develop youth, and to strengthen families and rural communities through the dissemination and application of research-based knowledge. That partnership is being placed in serious jeopardy by President Reagan's proposed 59 percent reduction in federal appropriations for the Cooperative Extension Service in fiscal year '87. The fact that this reduction comes in the midst of a major financial crisis throughout American agriculture and rural America is both surprising and extremely difficult to understand.

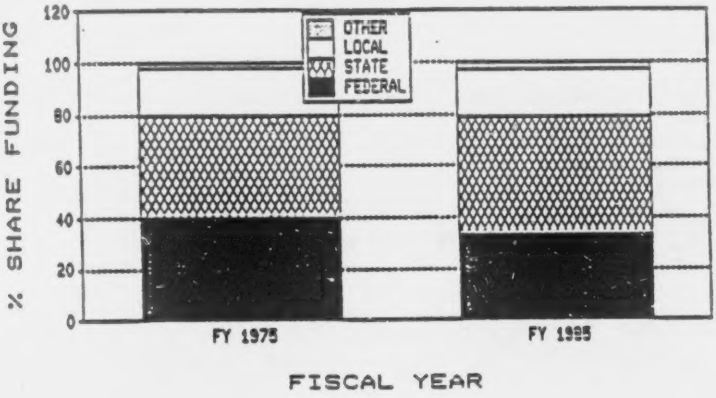
Personal stress and family tragedies have accompanied these economic troubles. Increasing suicides, murders, and family break-ups in rural America — a segment of society with a long tradition of stability -- are cause for substantial concerns in and about our nation's rural communities. The Cooperative Extension Services are working diligently and effectively to help farm families and others affected within those rural communities. They are helping them to look at their problems realistically, to identify viable options for the future, and to manage the stress within their families and institutions. As far as finances are concerned, current resources allow Extension to serve only about one-fourth of the farm families in need of intensive financial counseling. The proposed 59 percent cut in funding would further reduce the capacity of Extension to address these needs.

Consumers in both rural and metropolitan areas are other beneficiaries of the Cooperative Extension investment. Lower cost and better quality food is one result. In addition, consumers across the United States also benefit and learn from Extension efforts which improve their diet and health, reduce their medical costs, improve their abilities to manage household finances, help them be better parents, and increase the stability of the family unit, to name only a few.

A major portion of Extension's 4-H and home economics programs always have been carried out by volunteers. Extension trains the leaders and provides the knowledge base, while nearly three million active volunteers give their time, gain and improve leadership skills, and make it possible to reach millions more adults and youth. 4-H provides the only organized youth program available in many rural areas.

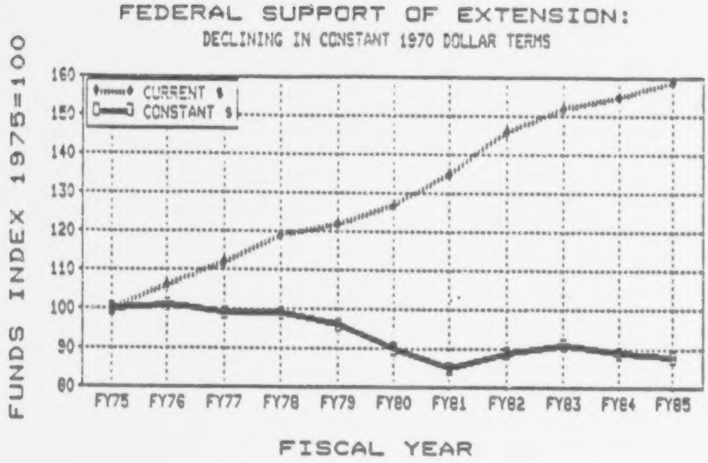
The federal-state Cooperative Extension system is active in 50 states, the District of Columbia, Puerto Rico, the Virgin Islands, Guam, American Samoa, Micronesia, and the Northern Marianas. Since the passage of the Smith-Lever Act of 1914 the system has succeeded as a federal-state-county partnership in both program decisions and funding commitments. In 1985, the federal government funded 33 percent of Extension efforts; states supported 46 percent; and local governments provided 21 percent.

SOURCES OF EXTENSION FUNDING:
FEDERAL SHARE DECLINING



The Cooperative Extension Service is also an integral part of land-grant universities in the states, including the historically black land-grant institutions, and Tuskegee University. It links the researchers in the Experiment Stations to those who need and use the research. By keeping abreast of the results of the research efforts of USDA and land-grant universities, Extension staff speed the application of scientific discoveries; i.e., facilitating technology transfer.

Cooperative Extension is a highly adaptable institution that modifies its outreach programs to accommodate the changing needs of its clientele. However, the capacity of Extension to respond to the array of local, state and national needs is a function of the resources available. In this regard, states have been forced to assume an increasingly larger role as federal support in real terms has declined. However, it is quite clear most states and counties which already bear the largest share of the burden are in no position to assume an even larger share.



FEDERAL SUPPORT OF EXTENSION:
DECLINING IN CONSTANT 1970 DOLLAR TERMS

The national interest is served, and federal investment required, as the Cooperative Extension system continues to:

> Lead and teach nationwide in adapting and transferring the science and technology which contributes to productivity, economic growth, and the viability of agricultural producers, businesses, families, and communities.
>
> Identify and respond educationally to critical national issues affecting the food and agricultural system, such as improving human nutrition and health, managing soil, water and other natural resources, and restoring U.S. agriculture competitiveness in the world market.
>
> Equip federal, state and local governments, organizations, and individuals to respond to natural disasters and catastrophes including outbreaks of animal and plant diseases, insect infestations, drought, floods, hurricanes, and tornadoes.
>
> Conduct nationwide, or targeted, educational programs necessary for effective and timely implementation of federal regulations and policies; recent examples include the Conservation Reserve program and the dairy herd buy-out.

RECOMMENDED MODIFICATIONS TO FY '87 BUDGET

To maintain current services of the system the Division of Agriculture of the National Association of State Universities and Land-Grant Colleges (NASULGC) is recommending the following modifications in the President's recommended budget for FY '87:

A. SMITH-LEVER 3b AND 3c FUNDS (+$126,011,000): Restoration and five percent increase over FY '85 funding. At a time when rural America is facing financial stress and economic uncertainty, the Cooperative Extension system provides needed assistance and education in four basic areas: agriculture and natural resources, home and family living, 4-H and youth development, and community resource development. The dollars invested in this unique federal, state and county partnership are returned many times over in terms of improved economic performance, improved quality of life for both clients and consumers as a whole, and reduction in environmental degradation.

B. 1890 EXTENSION PROGRAMS (+$11,424,000): Restoration and five percent increase over FY '85 in 1890 and Tuskegee extension programs for maintenance of their important agricultural programs for limited-resource clientele and, particularly, small and part-time farmers. Approximately one-half of funds allocated to these institutions will be used to enhance financial management programs to restore farm profitability and agricultural competitiveness.

The operation and maintenance of the Cooperative Extension Program at 1890 institutions depend almost entirely on federal funds. Thus the proposed federal reductions are even more serious for these institutions.

The 1985 Farm Bill provided authority for an 1890 Extension facilities program. While that program is critically needed, the request for funding is being deferred until the FY '88 budget, in recognition of the severity of current fiscal constraints.

C. D.C. EXTENSION (+$633,000): This represents a restoration of the D.C. Extension program with a 5 percent increase over FY '85.

D. RESTORATION OF CRITICAL SPECIAL PROGRAMS: The Smith-Lever 3d funds are distributed to states to address specific problems, with funding formulas based upon the extent of the problems in each state. The needs are well identified and the effectiveness of these programs is well documented. Continuation is essential if Extension is to respond to these needs. The specific programs are:

- Expanded Food and Nutrition Education Program (+$60,354,000): Better health, lower health costs, and increased family stability are among the direct results of this scientifically-based education program that helps low-income families ensure good nutrition within their financial limitations. This client group includes a high proportion of pregnant women and young children for whom adequate nutrition is a critical national concern.

- Integrated Pest Management (+$7,531,000): Continuing concerns about water quality, environmental impact, and farm production costs have created a need for an integrated systems approach to synthesize research in pest management technology and deliver it to farmers and the agribusiness industry. Projects are targeted to each state's agricultural need. The elimination of these programs would seriously impair the ability to attack mounting problems related to pest management.

- Farm Safety (+$1,020,000): Farming and ranching are among the most dangerous of all occupations. Education and training programs with farm operators, 4-H youth and others have increased their awareness and skills, thus preventing many farm-related accidents. Continuation of this program can save both lives and unnecessary medical costs, and reduce accidental disabilities.

- Pesticide Impact Assessment (+$1,716,000): The continued evaluation of agricultural chemical materials is essential to the nation's supply of food and fiber to a productive and profitable agricultural economy, to farm safety, and to the environment as a whole.

- Urban Gardening (+$3,500,000): Through this program, urban youth and adults have grown products with an annual market value of over $20 million. The application of the agricultural sciences to garden food production has contributed to general improvement in the diets of the gardeners, enhanced community cooperation, and led to personal satisfaction among thousands of participants.

- Rural Development Centers (+$720,000): Four rural development centers serving all states provide a focus for technology transfer and citizen awareness. Through integrated efforts and cooperation between research and extension faculty, the Centers encourage economic development and diversification, efficient community services, and contribute to a knowledgeable local leadership base.

- Renewable Resources Extension (+$2,625,000): A relatively small investment will provide a program of technology education that will increase the profitability of privately owned natural resources and better meet the growing demands on renewable resources.

E. NEW AND/OR EXPANDED SPECIAL PROGRAMS: With very limited resources, the Cooperative Extension system is addressing three of the major national issues facing America. Additional federal resources would be a timely and prudent investment.

1. FARM FINANCIAL MANAGEMENT/AGRICULTURAL COMPETITIVENESS (+$10,000,000): Expanded efforts are needed to address both the short-term and long-term needs of farm operators. In the short-term, distressed farm families need continuation and expansion of financial management and stress management assistance, hotline services, counseling relative to farm and family alternatives and continued cooperative support efforts among public agencies and lenders. In the longer term, a "systems approach" must be developed to reduce costs of production, increase marketing effectiveness, and thus improve the profitability of farming and increase U.S. agriculture's competitiveness in the market place.

   As we move into the third year of farm financial problems, serious stress is beginning to appear in rural communities as agribusiness and small business establishments go into bankruptcy or close. The need for rural revitalization is rapidly becoming a critical issue.

2. WATER QUALITY AND MANAGEMENT (+$5,000,000): Water is essential to human health as well as production of food, fiber, and forest products. Thirty-four states have identified problems of agricultural non-point sources of groundwater pollution. Economically sound systems must be developed, accepted, and adopted to ensure proper management and conservation of our water supply. The extension and research system must find increased resources to address these problems.

3. ENHANCED NUTRITION EDUCATION (+$5,000,000): Diet is known to be a factor in the prevention and treatment of heart disease, cancer and stroke, the leading causes of death in the United States. The complex nature of the diet-health relationship, concurrent with the proliferation of conflicting advice and increased concern for personal health and health costs in our society, have accelerated the need for reliable, objective, research-based nutrition information. Extension can provide centers of excellence to maximize education in food and nutrition, with the goal of improving consumer food choices leading to improvement in general health for all, including those at greatest risk, e.g., the elderly, adolescents, pregnant and lactating women.

FISCAL YEAR 1987 APPROPRIATIONS RECOMMENDATIONS

(In Thousands of Dollars)

		FY 1987	
Extension	FY 1986***	President's Proposal	NASULGC Recommendations
Smith-Lever:			
Sections 3b & 3c	$240,035	$127,547	$253,558
Section 3d:			
EFNEP	60,224**	-0-	60,354
Pest Management	7,486	-0-	7,531
Farm Safety	1,014	-0-	1,020
Pesticide Impact Assessment	1,706	-0-	1,716
Urban Gardening	3,479	-0-	3,500
Rural Devel. Center	720	-0-	720
IRM (Nebraska)	49	-0-	-0-
Farm Financial Management/Ag Competitiveness	1,491	-0-	10,000
Water Quality and Management	-0-	-0-	5,000
Enhanced Nutrition Education	-0-	-0-	5,000
D.C. Extension	977	399	1,032
1890 College & Tuskegee	17,635	7,204	18,628
Renewable Resources Extension	2,485	-0-	2,625
Federal Administration	5,446	4,850	4,850
Total	$342,747	$140,000	$375,534

** Includes $33,627,000 transfer from Food Stamp Program.
*** Subject to a 4.3% reduction (Gramm-Rudman-Hollings) effective March 1, 1986.

SUMMARY

The Cooperative Extension system is the connective tissue between the investment in research and its translation into economic and social results. Extension spreads knowledge beyond universities and laboratories. It is a two-way communications system extending knowledge to the points of application and alerting researchers to new problems of farmers and other users. It is a highly effective and flexible problem-centered system.

Today, change is affecting the United States at a record-breaking pace. The need for a dynamic, healthy agricultural science and education system has never been greater. That system and the partnership which I have described would be put in serious jeopardy if the 59 percent federal reduction recommended in the Executive Budget is accepted by Congress. Significant effects will immediately be felt:

- The typical state Cooperative Extension Service will lose 20 percent of its total operating budget. 1890's Tuskegee University and ES-USDA will lose 60 percent of their operating budgets.
- Conservative figures indicate forced staff reductions of more than 8,500 full-time staff equivalents — more than 3,000 professionals and 5,500 paraprofessionals.
- Major Extension programs would be totally eliminated state-by-state as each assesses its priority needs. In special danger are the Expanded Food and Nutrition Education Program (EFNEP), Integrated Pest Management (IPM), urban gardening in the largest city in 21 states, Renewable Resources Extension (RREA) and, in all likelihood, the regional rural development centers.
- Special consideration would be required from Civil Service for early retirement provisions as well as continuing employee fringe benefit liability.
- University tenure and/or union regulations would infringe on program disengagement opportunities.
- Extension would lose much of its current capacity to address the urgent financial stress problems of farmers, farm families and rural communities.
- Extension would be further reduced in its ability to respond to high national priorities in 1986-87: restoring agricultural profitability; water quality and management; and diet and health concerns.
- Capability of ES-USDA to coordinate programs with other federal agencies would be greatly reduced or eliminated.

In behalf of the Extension Committee on Organization and Policy (ECOP), I want to express gratitude for the continued and substantial investment Congress has sustained in the Cooperative Extension Service and land-grant system. Be assured, both remain true to their heritage — service to people and to the nation.

STATEMENT OF THE
DIVISION OF AGRICULTURE
NATIONAL ASSOCIATION OF STATE UNIVERSITIES AND LAND-GRANT COLLEGES

Presented by
Dr. Karen Craig, Vice President
American Home Economics Association; and
Associate Dean, Home Economics Extension
Purdue University

and

Dr. Joan R. McFadden, Executive Director
American Home Economics Association
Washington, D. C.

to the

HOUSE APPROPRIATIONS SUBCOMMITTEE FOR AGRICULTURE AND RELATED AGENCIES

April 14, 1986

From its beginning, Home Economics programs have been an integral component of the Cooperative Extension Service. The goal of the Home Economics component is to improve the quality of life for individuals and families through the enhancement of their economic and social well-being.

Families have a major impact on agriculture through their consumption and non-market production practices, their provision of human capital, and their linkage to the community and its environment. The centrality of the family to the productive capacity of the agricultural enterprise warrants the Extension Home Economics educational programs in order to ensure family well-being. The purchasing power, income stability, and resource management skills of families are important not only to their economic well-being but also to that of communities, especially those dependent on the food and agricultural economy. The physical well-being of families depends on meeting basic needs, including access to adequate housing, food and clothing, and on the continued availability and access to community resources.

The well-being of American families is essential to national strength since the values that underlie national stability are forged by families. Pressures brought to bear on families as a result of social and economic change have made them an object of much concern. Home Economics Cooperative Extension works to strengthen families by providing them research-based knowledge that can be applied to such areas as provision for food, clothing, shelter, and emotional support.

All of life's education does not occur in the classroom. Over 80 million families and youth are learning how to cope with and prevent some of life's problems through their involvement with the Extension system. The educational efforts of Home Economics Extension professionals currently are multiplied by the work of more than 600,000 volunteers in both rural and urban areas throughout the country. In addition to volunteers, a cadre of paraprofessionals works with Home Economics professionals in the Expanded Food and Nutrition Education Program (EFNEP), which seeks to better the nutrition of families with limited resources. The content of Home Economics programs makes them relevant to both rural and urban families, and the programs are thus offered accordingly. Home Economics educational programs are educational, developmental, and/or preventative.

Family Stress/Family Well-Being

The pressures impinging on the family and its individual members are increasing and are manifest in such factors as bankruptcies, divorce, alcholoism, suicide, and stress-related health conditions, some of which will not be apparent for some time.

The agricultural sector influences family and community well-being as evidenced by the recent farm crises in sections of the country. Families are faced with increasingly complex decisions involving demands on their resources while responding to forces of inflation, high unemployment, and changes in technology. Unemployment, coupled with inflation, make basic survival needs, such as housing, clothing, and in some cases even food, out of the reach of many. Problems of the elderly and other vulnerable groups are aggravated by the present inflationary trends.

Demands for programs to address the needs of distressed families is increasing. Home Economics Extension needs to continue the programs providing stress management assistance, counseling, and financial alternatives.

Nutrition

Home Economics Extension programs provide a vehicle for dissemination of information on food and nutrition to the general public. This is critical because of the complex nature of the diet-health relationship, and the proliferation of conflicting advice. The increased concern for personal health and health costs in our society have accelerated the need for reliable, objective, research-based nutrition information. This Home Economics Extension program maximizes the efforts to improve the nutrition and health status of the population through increased knowledge and understanding of the interrelationship of food and nutrition to health. The goal is to improve consumer food choices leading to better general health for all, including those at greatest risk, e.g., the elderly, adolescents, pregnant and lactating women. Therefore, it is important that enhanced nutrition education continue.

Production practices influence the nutritional content of a given food stuff, and the processes by which food is converted into an acceptable consumer product may further affect the nutritional content and/or its safety. Families need adequate and wholesome food. Education through Extension also addresses factors such as income, attitude, and lifestyle which play key roles in food selection and meal planning decisions of individuals and families.

Expanded Food and Nutrition Education Program (EFNEP)

Malnutrition is more prevalent among the poor than any other group in the United States. A recent research study of Oklahoma EFNEP families revealed that the program does make a significant different and is a cost effective preventative program. As a result of completing the EFNEP program, many families have left welfare, entered the labor market, increased self-confidence, and improved time and money management skills. The direct teaching and encouragement from the paraprofessionals help to motivate and direct the behavior of families.

The Expanded Food and Nutrition Education Program provides information to low-income homemakers, one-on-one or in small groups, on how to use available food resources to improve their families' diets. Since 1969, over two million homemakers have been enrolled in the program. More than 55,000 volunteers, including many who have completed the program, work with staff to extend this teaching to homemakers and youth. Better health, lower health costs, and increased family stability are among the direct results of this scientifically-based education program that helps low-income families ensure good nutrition within their financial limitations. This client group includes a high proportion of pregnant women and young children for whom adequate nutrition is a critical national concern.

Volunteers

About 900,000 Extension trained volunteers, including 600,000 volunteer Extension homemakers who are members of the National Extension Homemakers Council (NEHC), make up the volunteer Extension team. NEHC has been closely associated with Extension since 1936. The volunteers extend Extension education to millions of people who would not otherwise be reached; for example, some 57,000 EFNEP volunteers help teach nutrition to low-income adults and young people, and at least 150,000 volunteers trained by Extension home economists teach 4-H youth.

Home Economics Extension Program Priorities for the '80's

The Extension Service Home Economics programs have established the following as the major priorities for the 1980's:

Food, nutrition, and health. Helping people identify relationships between diet and health; teaching people how to select, prepare, preserve, and store food; informing people about the principles of food safety; determining attitudes and behavior that affect dietary patterns; and promoting fitness and health.

Family economic stability and security. Lifelong financial management, managing resources, increasing consumer competence in the marketplace, and understanding the economy.

Family strengths and social environment. Helping build strong, supportive family systems and encouraging family and community leaders to work together to create an environment that supports the needs of all families.

Energy and environment. Limiting energy use, helping families achieve the best possible home environment through good housing decisions, and educating people about ways to control and conserve the quality of the soil, water, and air that make up their general environment.

Volunteer/leadership development. Helping people develop community leadership skills; encouraging group involvement and participation in decision-making.

The President's proposed budget for FY '87 would reduce Federal funding for Extension Services, USDA, by 59% and direct the remaining funds to "enhance farm profitability and for the conservation of soil and water." By such a budget proposal, the Administration has failed to recognize that farm profitability depends on the well-being of the family, including their economic and social well-being. Home Economics Extension programs are directed to improve family well-being and, therefore, are an investment to build and maintain healthy bodies, healthy minds, healthy families, healthy communities, enriched family living, and are essential if farm families are to achieve "farm profitability."

On behalf of the American Home Economics Association, we thank you for the opportunity to discuss the importance of the Home Economics Extension Service programs and the importance of the Federal support in this partnership with states and local communities. We appreciate your support in the past and urge you to support the NASULGC budget for Extension Service, USDA, for FY '87 at five percent over the FY '86 level plus the new and/or expanded special programs including $5,000,000 for Enhanced Nutrition Education in order to assure quality Extension programs, including the Home Economics Extension programs.

TESTIMONY DEPOSITED WITH THE HOUSE APPROPRIATIONS SUBCOMMITTEE ON AGRICULTURE, RURAL DEVELOPMENT AND RELATED AGENCIES ON BEHALF OF STATE AGRICULTURAL EXPERIMENT STATIONS.

STATEMENT OF DR. L. W. DEWHIRST
DIRECTOR OF THE ARIZONA AGRICULTURAL EXPERIMENT STATION
AND
CHAIRMAN OF THE EXPERIMENT STATION COMMITTEE
ON ORGANIZATION AND POLICY (ESCOP) BUDGET SUBCOMMITTEE

FOR FY 1987
APRIL 14, 1986

The Budget Subcommittee of the Experiment Station Committee on Organization and Policy (ESCOP) has been actively and continuously involved in providing input to the budget development process for the Cooperative State Research Service (CSRS) of Science and Education of the United States Department of Agriculture. It is in this capacity that the State Agricultural Experiment Stations (SAES) in each state and territory in the nation present this statement in response to the President's FY '87 budget recommendations.

Federal funds leverage $4 of state and local funds for every $1 of Federal funds provided through CSRS.

The SAES system conducts sixty (60) percent of the publicly funded agricultural research in the nation. Its 12,500 scientists address critical issues affecting agriculture in every region of the United States. The results of the Federal-State partnership established by the Hatch Act in 1887, one hundred years ago, have been the greatest success story in the human struggle to achieve adequate food and fiber. Agricultural production in the United States not only provides food to its citizens at the lowest relative cost in the world, it also accounts for major components of its exports.

The entire SAES system is acutely aware of the Congressional dilemma in responding to needs to develop reasonable and prudent budgets. These are paralleled by similar problems in almost every state. Certainly, we are supportive of those efforts at all levels. It is in the light of these realities that the SAES system has prepared this statement.

At the same time, we must look ahead and recognize that there are components that will help to solve problems as well as those which add to the dilemma. Agricultural research is a part of the solution and not a part of the problem. Research discoveries are essential to continued progress in a viable and competitive agricultural production system. The history of this country's entire development and premier position is testimony to that fact. Only through research will input costs decrease, quality be maintained, acceptable levels of environmental pollution be reached and maximum economic benefit occur through successful competition in the global marketplace.

The ESCOP Budget Subcommittee originally developed a budget which included five (5) new or expanded initiatives. These included proposed increases in Formula Funds, Special Grants (89-106) and Competitive Grants (89-106). However, the realities of the current financial crisis and the dilemma that Congress faces has caused us to reevaluate our actions and to balance our concern for the financial state of the nation with the need to move ahead in research. The result is a proposal reaching you which proposes only very modest increases but does recommend reinstatement of the Special Grants (89-106) program and the inclusion of a New National Research Program on Water Quality and Management of $16,000,000.

Attached to this testimony is a copy of the Hatch Act Centennial Budget proposed by the ESCOP Budget Subcommittee and approved by ESCOP and the Division of Agriculture. The budget amounts included are identical with these included in the FY 1987 Budget Recommendation prepared and presented to you today by the Division of Agriculture. They have been separated from that document only to better identify the proposed research budget.

The ESCOP Budget recommendations are backed up by an extensive effort by the SAES system to plan its future cooperatively. The results of those efforts are appended to this statement and are entitled "Research Initiatives: A Research Agenda for the State Agricultural Experiment Stations."

Finally, the entire SAES system expresses its appreciation for the opportunity to participate in a legislative process which allows for input from all levels of our society. We can each be concerned and each share in our country's problems and accomplishments. We are honored to be a part of that process.

MONDAY, APRIL 14, 1986.

SOIL AND WATER RESEARCH LABS

WITNESSES

RICHARD FOSSUM, EASTERN SOUTH DAKOTA RESEARCH FARM

DALE BRAATEN, REPRESENTING THE SOIL AND WATER CONSERVATION RESEARCH ASSOCIATION

Mr. WHITTEN. Next we turn to Mr. Richard Fossum and Mr. Dale Braaten.

Mr. BRAATEN. Thank you, Chairman Whitten.

Mr. WHITTEN. We will be glad to hear from you.

Mr. BRAATEN. I would like to introduce my colleague, Richard Fossum, who will give the next testimony for the Eastern South Dakota Research Farm. My name is Dale Braaten. I am also from the Eastern South Dakota Research Farm, presenting this testimony in substitution for Willard Micklish and Dr. John F. Stock, from the Soil and Water Conservation Research Association, Inc., Morris, Minnesota. These two facilities mentioned work in conjunction with each other.

Our association has appeared before this Committee in each of the past 16 years in support of our overall USDA ARS research and, in particular, for support of the ARS research conducted at the North Central Soil Conservation Research Laboratory at Morris, Minnesota.

We wish to thank you for the privilege and the opportunity to once again appear before you in support of the laboratory's research program. As active board members of our association of interested farmers and businessmen, we speak to the concerns of the agriculture community located in the northern Corn Belt where the laboratory is situated.

We are well aware of the economic crisis that plagues today's American farmer. We are also aware of the efforts to reduce Federal spending and to increase accountability and effectiveness of available funds. In response, ARS continues to investigate agricultural problems of the highest priority to improve the economic condition for today's farmer while protecting our water resources for the future.

To assure maximum funding possible for bench research during these times of reduced budgets, the administration of ARS had actively and efficiently streamlined the agency for more efficient operations, cost-effectiveness, and accountability. We support this action which allocates available funds to laboratories having high priority research programs.

The research mission of the North Central Soil Conservation Research Laboratory at Morris, Minnesota, is to develop efficient conservation production systems for northern climates while maintaining or improving the quality of our water resources. Research to accomplish this mission is being conducted cooperatively with the Agricultural Experiment Stations of the University of Minnesota, South Dakota State University and the USDA Northern Grain Insects Research Laboratory at Brookings, South Dakota.

The research team at the Morris Laboratory conducts ongoing research to develop and improve soil and water conservation and increase the efficiency of agricultural production. Emphasis is placed on reducing the input requirements for crop production. One activity includes research to limit the number of passes of field equipment, thereby reducing fuel requirements, reducing adverse effects of soil compaction due to wheel traffic, and promoting better residue management encouraging better soil conservation. Other research activities are designed to improve the efficiency of applied fertilizer for reduced tillage systems and to control the application of expensive chemicals by employing integrated weed and insect management systems. The laboratory's history of research accomplishments is to be envied, yet much remains to be done.

As producers of agricultural products, we are concerned that future resources be allocated to ensure improved crop production efficiency while maintaining our priceless agricultural soil base and water resources. With increased concern for the quality of our nation's water resources as a result of inefficient use of agricultural chemicals, it is incumbent on the research community to discover techniques for protection of both our groundwater and surface water resources. It is essential that the United States maintain its dominant position in agricultural production while protecting and preserving its resources and environment.

As farmers, we are being asked to provide domestic and world food and fiber needs with little profit and often at a loss. Obviously, this cannot continue without major disruptions in our overall agricultural production system with which we are so accustomed. As solutions are found for these problems of historic importance, we are confident that part of the solution will be additional knowledge obtained as a result of continuous, long-range basis agricultural research and its application to the nation's farmlands.

The research program at the Morris Laboratory focuses on providing knowledge and recommendations regarding cost-effective production systems for application to the highly productive areas of the Northern Corn Belt. The Morris Laboratory wishes to have a scientist replaced who was transferred from the facility in 1984. This person will be used to integrate the various components of cost-effective production systems into a user-oriented model. This will allow more effective extrapolation of the basic physical processes involved to areas of other topography, climates, and soils for the purpose of determining the best production systems for northern climates.

Again, thank you, Chairman Whitten, for your past and future support of these facilities.

Mr. **Whitten**. We appreciate your appearance here. You have heard other statements before yours. This is a big country, and we try to look at all of it.

Mr. **Braaten**. Thank you.

Mr. **Fossum**. Chairman Whitten and the Committee, I represent Eastern South Dakota Soil and Water Research Farm at Madison, South Dakota, and I would like to give this testimony for them.

Thank you for the privilege and opportunity to appear before this Subcommittee in support of the overall USDA Agricultural Research Service programs and, in particular, for research being conducted at the Northern Grain Insects Research Laboratory, Brookings, South Dakota, and the North Central Soil Conservation Research Laboratory, Morris, Minnesota.

We represent the Eastern South Dakota Soil and Water Research Farm, Inc., which is owned by 15 Soil and Water Conservation Districts in Eastern South Dakota. As active members of the Board of Directors of this research farm, and as active farmers, we are speaking today for over one-third of the people of South Dakota. We would like at this time to express our appreciation for the support your Committee has given to agricultural and soil and water conservation research in the past. We also support your efforts to maintain conservation funding in these times of Federal spending reductions.

We fully support the actions taken by the Agricultural Research Service to streamline the agency to increase the effectiveness and accountability of available research fundings. ARS continues to investigate agricultural problems of highest priority in the effort to help resolve the economic crisis that farmers are experiencing by placing as much support at the research bench as possible.

The research teams at the Morris and Brookings Laboratories conduct research to minimize inputs for agricultural production by evaluating whole production systems. The use of reduced tillage systems has gained popularity; however, recent research indicates that these practices may provide a more favorable environment for major soil pests such as the corn rootworm, cutworms and plant diseases. Performance of herbicides and pesticides in controlling weeds and insects can be affected by surface residues. The relationship between water quality, both surface and underground, and integrated conservation production systems is also being evaluated. We are concerned that future resources be allocated to ensure improved crop production efficiency while maintaining our priceless agricultural soil base and water resources.

The ARS research programs at Brookings and Morris are unique in that by integrating their programs as well as by cooperating with scientists located at South Dakota State University, a multidisciplinary research effort has been developed which will provide better insights to problems which we as producers encounter. To enhance this effort and in the spirit of increasing research effectiveness and cooperation, the Board of Directors of Eastern South Dakota Soil and Water Research Farm have taken a bold more to relocate the research facility to a location closer to Brookings, the home of South Dakota State University and the Northern Grain Insects Research Laboratory. This is being done after 26 years of the facility being located some 38 miles from Brookings. A joint research project intimately involving the South Dakota Agricultural Experiment Station and the USDA ARS facilities at Morris and Brookings is being planned. The project has objectives which will produce information and practices relating to groundwater quality, integrated pest management, and conservation production systems for farmer use. We expect that the already productive programs at Morris and Brookings will be further enhanced by this change. Any positive reinforcements in support of this local grass roots initiative would be appreciated as the project becomes a reality.

Thank you very much.

Mr. **Whitten**. Thank you very much for your appearance. We appreciate it.

[The full statements presented by Messrs. Braaten and Fossum follow:]

STATEMENT OF THE EASTERN SOUTH DAKOTA SOIL AND WATER RESEARCH FARM, INC.

presented by

RICHARD FOSSUM and DALE BRAATEN

to the

HOUSE APPROPRIATIONS COMMITTEE
SUBCOMMITTEE ON AGRICULTURE, RURAL DEVELOPMENT AND RELATED AGENCIES

NINETY-NINTH CONGRESS

April 1986

Thank you for the privilege and opportunity to appear before this Subcommittee in support of the overall USDA-Agricultural Research Service programs and, in particular, for research being conducted at the Northern Grain Insects Research Laboratory, Brookings, SD and the North Central Soil Conservation Research Laboratory, Morris, MN.

We represent the Eastern South Dakota Soil and Water Research Farm, Inc., which is owned by 15 Soil and Water Conservation Districts in Eastern South Dakota. As active members of the Board of Directors of this research farm, and as active farmers, we are speaking today for over one-third of the people of South Dakota. We would like at this time to express our appreciation for the support your committee has given to agricultural and soil and water conservation research in the past. We also support your efforts to maintain conservation funding in these times of federal spending reductions.

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The ARS research programs at Brookings and Morris are unique in that by integrating their programs as well as by cooperating with scientists located at South Dakota State University, a multidisciplinary research effort has developed which will provide better insights to problems which we as producers encounter. To enhance this effort and in the spirit of increasing research effectiveness and cooperation, the Board of Directors of the Eastern South Dakota Soil and Water Research Farm have taken a bold move to relocate the research facility to a location closer to Brookings, the home of South Dakota State University and the Northern Grain Insects Research Laboratory. This is being done after 26 years of the facility being located some 38 miles from Brookings. A joint research project intimately involving the South Dakota Agricultural Experiment Station and the USDA-ARS facilities at Morris and Brookings is being planned. The project has objectives which will produce information and practices relating groundwater quality, integrated pest management, and conservation production systems for farmer use. We expect that the already productive programs at Morris and Brookings will be further enhanced by this change. Any positive reinforcements in support of this local grass roots initiative would be appreciated as the project becomes a reality.

STATEMENT OF THE BARNES-AASTAD
SOIL AND WATER CONSERVATION RESEARCH ASSOCIATION, INC.
Morris, Minnesota
presented by
Willard R. Micklish and John F. Stock, M.D.
to the
House Appropriations Committee
Subcommittee on Agriculture, Rural Development and Related Agencies
Ninety-Ninth Congress
April 1986

Our association has appeared before this committee in each of the past 16 years in support of overall USDA-ARS research, and in particular for support of the ARS research conducted at the North Central Soil Conservation Research Laboratory, Morris, Minnesota. We wish to thank you for the privilege and opportunity to once again appear before you in support of the Laboratory's research program. As active board members of our association of interested farmers and businessmen, we speak to the concerns of the agricultural community located in the Northern Corn Belt where the Laboratory is situated.

We are well aware of the economic crisis that plagues today's American farmer. We are also aware of the efforts to reduce federal spending and to increase accountability and effectiveness of available funds. In response, ARS continues to investigate agricultural problems of highest priority to improve the economic conditions for today's farmer while protecting our water resources for the future. To assure maximum funding possible for bench research during these times of reduced budgets, the administration of ARS has actively and efficiently streamlined the agency for more efficient operations, cost-effectiveness, and accountability. We support this action which allocates available funds to laboratories having high priority research programs.

The research mission of the North Central Soil Conservation Research Laboratory at Morris, Minnesota, is to develop efficient conservation production systems for northern climates while maintaining or improving the quality of our water resources. Research to accomplish this mission is being conducted cooperatively with the Agricultural Experiment Stations of the University of Minnesota, South Dakota State University and the USDA Northern Grain Insects Research Laboratory at Brookings, South Dakota.

The research team at the Morris Laboratory conducts ongoing research to develop and improve soil and water conservation and increase the efficiency of agricultural production. Emphasis is placed on reducing the input requirements for crop production. One activity includes research to limit the number of passes of field equipment, thereby reducing fuel requirements, reducing adverse effects of soil compaction due to wheel traffic, and promoting better residue management encouraging better soil conservation. Other research activities are designed to improve the efficiency of applied fertilizer for reduced tillage systems and to control the application of expensive chemicals by employing integrated weed and insect management systems. The Laboratory's history of research accomplishments is to be envied, yet much remains to be done.

As producers of agricultural products, we are concerned that future resources be allocated to insure improved crop production efficiency while maintaining our priceless agricultural soil base and water resources. With increased concern for the quality of our nation's water resources as a result of inefficient use of agricultural chemicals, it is incumbent on the research community to discover techniques for protection of both our groundwater and surface water resources. It is essential that the United States maintain its dominant position in agricultural production while protecting and preserving its resources and environment.

As farmers, we are being asked to provide domestic and world food and fiber needs with little profit and often at a loss. Obviously, this cannot continue without major disruptions in our overall agricultural production system with which we are so accustomed. As solutions are found for these problems of historic importance, we are confident that part of the solution will be additional knowledge obtained as a result of continuous, long-range basic agricultural research and its application to the nation's farmlands.

The research program at the Morris Laboratory focuses on providing knowledge and recommendations regarding cost-effective production systems for application to the highly productive areas of the Northern Corn Belt. The Morris Laboratory wishes to have a scientist replaced who was transferred from the facility in 1984. This person will be used to integrate the various components of cost-effective production systems into a user-oriented model. This will allow more effective extrapolation of the basic physical processes involved to areas of other topography, climates, and soils for the purpose of determining the best production systems for northern climates.

MONDAY, APRIL 14, 1986.

FOOD ANIMAL PRODUCTION CENTER

WITNESS

WALTER C. BOWIE, DVM, PH.D., DEAN, SCHOOL OF VETERINARY MEDICINE, TUSKEGEE, ALABAMA

Mr. WHITTEN. We turn now to Dean Walter C. Bowie, of the Tuskegee Institute, School of Veterinary Medicine.

We are glad to hear from you.

Dr. BOWIE. Thank you.

Mr. Chairman and members of the Committee, I am Walter C. Bowie, Dean of the School of Veterinary Medicine at Tuskegee University, testifying on behalf of the school's request for $6 million for the proposed Regional Center for Food Animal Production, Research and Service. You will recall that the school made a presentation on this subject before your Committee one year ago. Your Committee expressed its support for the project and stated in its report, and I quote:

"The Committee recommends $600,000 for planning for a new facility to be located within the School of Veterinary Medicine at Tuskegee University, a regional institute for food animal production, research and service. In fiscal year 1985 the Committee requested that the Department conduct a feasibility study of the proposed institute and a highly supportive feasibility study has now been completed."

The Senate Appropriations Subcommittee agreed with the House recommendation made by this Committee to devote $600,000 for planning and initial program staffing for the project, and the University is truly grateful for this recognition. The planning process has begun, and this year the University is asking Congress to appropriate $5.4 million, the balance of the original request, for the construction of this project.

I would like to take this opportunity to thank the Chairman and the members of the Committee for appropriating the planning funds. To date, the school has not received the funds from the Department of Agriculture, but the school's Veterinary Research Council is conducting the planning process as best we can under the circumstances. The school is preparing an overall five-year plan and the Center for Food Animal Production is an essential element of that plan.

I am also very appreciative for the work that the Chairman and the members of the Committee did in assisting the University in reprogramming the appropriations from ARS to CSRS so that the funds would have the proper authority.

There are two elements of the law which I would like to address today, Mr. Chairman. They are the requirement that the school be regional in nature and the requirement that the school secure matching state funds.

The Tuskegee University School of Veterinary Medicine has provided regional training in veterinary medicine since its inception, and for that reason, ironically, it does not have access to state matching funds. In 1948, Tuskegee Institute School of Veterinary

Medicine began participating in the Southern Regional Education Board with the responsibility to provide regional veterinary medical training of black students in the South. The School of Veterinary Medicine at Tuskegee has trained 570 students from 13 SREB states: Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, and West Virginia. Many of these students were trained under the terms of the SREB contract. Currently eight of these states and the state of New Jersey maintain contractual agreements with the School. It should be noted that these agreements are no longer limited to the training of black students as they originally were.

As a result of its own affirmative action efforts and due to the changing SREB arrangements, Tuskegee's student body has become the most diverse among veterinary schools. In academic year 1985-86, Tuskegee enrolled 227 veterinary students from 29 states, the District of Columbia, the U.S. Virgin Islands, and the U.S. Commonwealth of Puerto Rico. Included in these 29 states were all the 12 states participating in the original SREB agreement and the additional southern states of Arkansas, Delaware, Oklahoma, and Texas. Tuskegee University graduates are located in 43 states and the District of Columbia, the U.S. Virgin Islands and the Commonwealth of Puerto Rico; thus, Tuskegee School of Veterinary Medicine is, Mr. Chairman, a national resource.

From the above information it is clear that the School of Veterinary Medicine has served as a national as well as a regional training center. The major vehicle that has permitted students to attend Tuskegee University, the SREB contract, is for training purposes only. It does not permit financial support of capital improvements. In truth, Tuskegee University is a privately controlled, state-related institution. As such, the institution does not receive state support but, rather, state assistance appropriated annually.

Public Law 95-113 requires that universities which receive appropriations to establish or expand schools of veterinary medicine secure matching funds from the state government. In the testimony one year ago, the School of Veterinary Medicine requested a waiver of the matching funds requirement. The language in the reports from the House and Senate Appropriations Committees did not refer to the waiver request. There are two compelling reasons for waiving the matching funds requirement. First, there is no reasonable means available to obtain the matching funds. Because of its status as a state-assisted institution, it is unlikely that Tuskegee University could secure matching funds for the appropriation. Therefore, it is crucial that the Congress waive the requirement for matching funds in the case of Tuskegee University School of Veterinary Medicine.

Second, the probable benefit of this project outweighs the public interest in securing the matching funds requirement. Through the proposed center, research will play a major role, a key role in assisting the small farmer. The proposed center must bridge the gap between the limited resource farmer and recent advances in biotechnology that hold great promise for improving animal health. Diseases affecting minor species and other livestock throughout the South can cause major economic losses and reduce food production at a time when there is a great demand among the population for meat protein. It is reasonable to assume that recent advances in biotechnology can help to solve some of the current animal disease problems. These advances may enable the scientists to gain new knowledge of the immune system that will lead to the development of improved vaccines and prophylactic agents for the prevention and control of animal diseases through recombinant DNA and development of monoclonal antibodies to diagnose infection and offer passive immunity. The creation of improved feed crops and additives to improve animal nutrition, the large scale production of growth hormones to speed animal maturation, improved embryo transfer techniques for superior breeding animals and the development of genetically disease resistant livestock through modern biotechnology will allow the American farmer to produce more food for more people and supply a better export market. Such advances in time will provide vital tools to the limited resource farmer so that he may be able to produce more food at less cost and thus improve the quality of rural life.

Tuskegee University can play a vital role in this effort because of its extraordinary history of aiding the small farmer. Recent advances in biotechnology will support a continuum to this legacy.

Thank you, Mr. Chairman, for the opportunity to appear before your Committee.

Mr. WHITTEN. We are glad to have you appear before us. You have heard the statements we have made about our problems this year. I do not know how we are going to fit everything together, but we will make an effort to. In order to look after what we have need for in agriculture, we are going to have to transfer from other activities. But we do appreciate your problem and we appreciate your appearance. We will look it all over and see what we can recommend.

Dr. BOWIE. Thank you very much, Mr. Chairman.

Mr. WHITTEN. You do a fine job.

Dr. BOWIE. Thank you again.

[Dr. Bowie's full statement follows:]

Tuskegee Institute

TUSKEGEE INSTITUTE
ALABAMA 36088

SCHOOL OF VETERINARY MEDICINE
OFFICE OF THE DEAN

TESTIMONY OF THE

TUSKEGEE UNIVERSITY SCHOOL OF VETERINARY MEDICINE

before the

Appropriations Subcommittee on Agriculture
Rural Development, and Related Agencies
U.S. House of Representatives

relative to

Public Law 95-113, Section 1415
Grants to Establish or Expand Schools of Veterinary Medicine

Walter C. Bowie, DVM, Ph.D.
Dean, School of Veterinary Medicine
Tuskegee University
Tuskegee, Alabama

April 14, 1986

OFFSET
CAMERA COPY

Mr. Chairman and members of the committee:

I am W.C. Bowie, Dean of the School of Veterinary Medicine at Tuskegee University, testifying on behalf of the school's request for $6.0 million for the proposed Regional Center for Food Animal Production, Research and Service. You will recall that the school made a presentation on this subject before your committee one year ago. Your committee expressed it's support for the project and stated in its report:

> "The Committee recommends $600,000 for planning for a new facility to be located within the School of Veterinary Medicine at Tuskegee University, a regional institute for food animal production, research and service. In fiscal year 1985 the Committee requested that the Department conduct a feasibility study of the proposed institute and a highly supportive feasibility study has now been completed."1/

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(18), and many of these students were trained under the terms of the SREB contract. Currently eight of those states and New Jersey maintain contractual agreements with the School. It should be noted that these agreements are no longer limited to the training of black students as they orginally were.

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Thank you Mr. Chairman, for the opportunity to appear before you today.

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1. Committee on Appropriations, U.S. House of Representatives, Report 99, Agriculture, Rural Development, and Related Agencies Appropriation Bill, 1986, p.32.

MONDAY, APRIL 14, 1986.

BELTSVILLE RESEARCH CENTER

WITNESSES

DEBRA COUNTRYMAN SHUTT, DIRECTOR OF MARKETING
ELAINE ACEVEDO, DIRECTOR OF GOVERNMENT AFFAIRS
NANCY JACKS MONTGOMERY, DIRECTOR OF GROWERS DIVISION

Mr. WHITTEN. Next we have Ms. Debra Countryman Shutt, Director of Marketing, White's Nursery and Greenhouses, Incorporated

Ms. SHUTT. Thank you for letting me be here this afternoon.

My name is Debra Countryman Shutt. I am the Marketing Director of White's Nursery and Greenhouses, Incorporated, in Chesapeake, Virginia. We are six acres of potted plant production, specializing in chrysanthemums, poinsettias, and other floral products.

I am here on behalf today of the Society of American Florists. The Society of American Florists is a trade association representing the entire floral industry. Our approximately 9,000 members include qrowers, wholesalers, retailiers, allied tradespeople, and 144 other floral industry trade associations, whose memberships comprise approximately 22,000 additional businesses.

The United States Department of Agriculture, Agricultural Research Service at Beltsville has conducted necessary florist and nursery crops research for more than 40 years. In the late 1940's, the Beltsville staff began research on a wide range of crops that has included pioneering studies in genetics for crop improvement and control of pests and diseases. The floral industry wants to see the laboratories' beneficial work continue.

I am here today because the industry is very concerned about 40 years of deterioration, which has taken its toll at the USDA Research Center at Beltsville. The laboratories and certain other facilities in the Center are in good enough condition to provide some research data, but many of the greenhouses are outmoded, deteriorating and terrible energy wasters. The structures are a commercial greenhouse design that was typical in the 1940's. These structures do not have the small experimental units which are needed to do the type of environmental control research associated with things that they are doing at Beltsville.

The greenhouses have not been adequately maintained due to a lack of funds, and as a result, many are in extremely poor condition. They have problems with excessive air infiltration, which when you are trying to do breeding studies can cause a lot of havoc. Heating and cooling systems are unable to maintain acceptable temperatures during the winter or the summer.

Once again, as we did in 1982, our industry requests the Subcommittee to appropriate funds in fiscal year '87 to renovate the Beltsville facility so that the laboratories are adequate to continue conducting research.

We have over there over 450 scientists, who are doing a number of research projects, which stem not only to floral industry of its own, but into other allied agricultural areas.

The laboratory's pathology and entomology research is important to the floral industry's ability to improve the quality of floral products which will enable our American growers to compete more vigorously with foreign imports. This is one of our biggest problems right now.

Research is concurrently being done in the lab on leafminer infestations, which has been devastating the American growers, citrus canker and Gypsy moth are two other areas that I am sure you are very aware of.

The floral industry benefits by getting immediate help where crop losses are occurring as a result of insect pests and diseases. I think the citrus canker has come to light in the recent year or two. The electron microscope over at Beltsville is the only facility right now that is able to do the kind of citrus canker research that they are doing, they are studying both types of bacteria that is causing this problem, the Florida bacteria and the Mexican bacteria. They are doing work that cannot even be done in the citrus growing areas.

The leafminer is a problem that attacks the crops of many of the growers, such as the concern that I represent, White's Nursery. It has been a recurring pest problem in chrysanthemums, and has caused significant economic losses in the past 40 years. The leafminer attacks more than 100 plant species in the United States and around the world.

In one year, for example, the leafminer caused over $17 million damage to just one State's chrysanthemum crop. Recognizing the high priority need for intensified leafminer researcher, the floral industry sponsored three national conferences on the problem, and contributed more than $110,000 to reseach.

Through the development of better methods of disease diagnosis, pathogen elimination and ways to reduce the spread of pests, the floral industry and other agricultural industries can become less reliant on expensive and hazardous chemicals. This is a major concern of ours, our floral industry is using pesticides, but we know that they are becoming harder and harder to acquire, and the EPA restrictions are making it difficult for us to continue to use, to continue to rely on the chemicals for our use.

Our industry depends on the work that is being done by the Florist and Nursery Crops Laboratory. We recognize that in order to stay in business, we must provide direct financial aid in support of the Florist and Nursery Crops Laboratory programs. During the past four year, this support through contributions of other floral associations has expanded, and last year totaled more than $100,000 for new crops, pathology and entomology research.

And, are willing to do our part, the floral industry itself is contributing $50,000 each year for the next five years, for new crop development. This amount has been matched by the USDA Agricultural Research Service. This total of a half a million dollars is supporting collection and evaluation of a wide range of new species collected around the world, which often brings to us crops which are resistant to some of these disease problems.

In conjunction with the new crops program, an advisory committee to the Laboratory was formed in 1984, with the leadership provided by SAF. The committee provides guidance on developing procedures to introduce each new crop. In addition, providing guidance on commercialization and production of new crops, the committee is involved in developing procedures for market analysis and consumer acceptance of each new crop.

The floral industry would like to do more, but as I pointed out earlier, it is an industry of small businesses, that cannot afford the independent research. With the facility at Beltsville already geared to this sort of research, and the enormous amount of support our industry has already provided, we would like to know that our research is being conducted in facilities that can offer the environmental conditions required to collect solid, reliable research results. Many of the tests that they are doing can easily be invalidated with some of the problems that they have over there, through the leaking greenhouses, temperatures are not maintained, or other pests come in and cause secondary problems.

In view of the many budget cuts that have resulted from Gramm-Rudman, we are asking that only the first stage of this renovation project befunded at this time. We know we request a lot, we request $965,000 be budgeted in fiscal year 1987, specifically for the renovations to the Beltsville Florists and Nursery Crops Laboratory greenhouse structures, where the research is being conducted.

This new modernization plan would include four of the 40 by 80 foot sections of greenhouses. Cost for one section would be $300,000. The three other sections would cost approximately $150,000 each.

The Florists and Nursery Crops Laboratory needs an additional $215,000 to build nine new, small, individual units for entomology project.

The Government has traditionally helped industries by nurturing those that foster employment and economic growth. The 1979 Census of Horticultural Specialties reported on nearly 224,000 workers involved in basic horticultural production; wholesaling and retailing operations, and the allied floral industries certainly add many more. Production for 1979 was valued at over $3.2 billion at the grower level alone. If the industry has kept pace with even farm level inflation since that period, it accounts for at least $4.4 billion in sales today. At retail, this figure is conservatively at least double. Our industry, from all indications, has been one of the few shining stars in the agricultural scene of recent years.

Certainly, the $965,000 price tag for the much needed modernization of the Florist and Nursery Crops Laboratory at Beltsville can be justified in light of what our industry returns to the economy.

I think we should keep in mind that many international visitors come every year to see what type of research we are doing here in the United States, and much of what is going on in the agricultural research is happening at Beltsville, and it is a shame that the greenhouses have deteriorated to such an extent, and some of that can be invalidated.

Mr. **Whitten**. We appreciate your testimony.

You well know our problems now. As I have said earlier, the Senate has a rule now that they cannot add anything, without reducing something as an offset.

For the first time, we have a request from the OMB for 1986 to reduce rural housing, so as to pay the dairymen in Missouri, Arkansas and Oklahoma for destroying cattle. If we go along with that, it lets the Executive Branch run the whole business. So I am sure that we are not likely to follow their recommendations about cuts. But that is the way we are getting the requests from the Office of Budget Management, which makes for a real problem. But we do appreciate your interests for the floral business, which has become tremendous in size. I am sure that we have the need to keep up to date on Beltsville and elsewhere. This is a pretty difficult time to say that we can, but we do appreciate your statement, and it will be considered.

Ms. SHUTT. Thank you very much.

[Ms. Shutt's statement follows:]

STATEMENT OF

DEBRA COUNTRYMAN SHUTT

DIRECTOR OF MARKETING

WHITE'S NURSERY AND GREENHOUSES

CHESAPEAKE, VIRGINIA

ON BEHALF OF THE SOCIETY OF AMERICAN FLORISTS (SAF)

BEFORE THE

SUBCOMMITTEE ON AGRICULTURE

RURAL DEVELOPMENT AND RELATED AGENCIES

OF THE APPROPRIATIONS COMMITTEE

U.S. HOUSE OF REPRESENTATIVES

APRIL 14, 1986

OFFSET
CAMERA COPY

The Society of American Florists (SAF) is a trade association representing the entire floral industry. Our approximately 9,000 members include growers, wholesalers, retailers, allied tradespeople and 144 other floral industry trade associations, whose memberships comprise an additional 22,000 businesses.

The United States Department of Agriculture, Agricultural Research Service at Beltsville has conducted necessary florist and nursery crops research for more than 40 years. In the late 1940s, the Beltsville staff began research on a wide range of crops that has included pioneering studies in genetics for crop improvement and control of pests and diseases. The floral industry wants to see the laboratories' beneficial work continue.

Our industry is concerned because 40 years of deterioration has taken its toll on the greenhouses at the Beltsville Agricultural Research Center. While the laboratories and certain other facilities at the center are in good condition and provide invaluable research data, many of the greenhouses are outmoded, deteriorating and energy wasters. The structures are a standard commercial greenhouse design typical of the 1940s. These large structures do not have the small experimental units with associated environmental control required for modern research.

Also, the greenhouses have not been adequately maintained due to a lack of funds. As a result, many are in extremely poor condition with excessive air infiltration, and heating and cooling systems that are unable to maintain acceptable temperatures during the winter or summer.

Once again, as we did in 1982, our industry requests the subcommittee to appropriate funds in FY87 to renovate the Beltsville facility so that the laboratories are adequate to continue conducting research. The lab is currently working on a wide spectrum of activities that range from applied to basic research.

The Laboratory's pathology and entomology research is important to the floral industry's ability to improve the quality of floral products which will enable our American growers to compete more vigorously with foreign imports. Research is concurrently being done by the Lab on Citrus canker, Gypsy moth and leafminer infestations. The floral industry benefits by getting immediate help where crop losses are occurring as a result of insect pests and diseases. The leafminer has been a recurring pest problem in chrysanthemums and has caused significant economic losses during the past 40 years. The leafminer attacks more than 100 plant species throughout the United States and many parts of the world. In one year, for example, leafminer caused nearly $17 million in damage to one state's chrysanthemum crop. Recognizing the high priority need for intensified leafminer research, the floral industry sponsored three national conferences on the problem and contributed more than $110,000 to research.

Through the development of better methods of disease diagnosis, pathogen elimination and ways to reduce the spread of pests, the floral industry and other agricultural industries can become less reliant on expensive and hazardous chemicals. This becomes of primary concern to our floral industry because pesticides available for our use are becoming harder to acquire; and EPA restrictions are making it difficult for us to continue to rely on chemicals.

Our industry depends on the work being done by the Florist & Nursery Crops Laboratory. We recognize that in order to stay in business, we must provide direct financial aid in support of Florist and Nursery Crops Laboratory programs. During the past four years, this support through contributions of other floral associations has expanded and last year totaled more than $100,000 for new crops, pathology and entomology research.

Support of $50,000 a year, for each of the next five years, is being contributed by the floral industry for new crop development. This amount has been matched by the USDA Agricultural Research Service (ARS). This total of $500,000 is supporting collection and evaluation of a wide range of new species collected around the world.

In conjunction with the new crops program, an advisory provided by SAF. This groups gives generously of its time and money in order to meet every six months to review crop priorities and research results. The committee provides guidance on developing procedures to introduce each new crop. In addition to providing guidance on commercialization and production of new crops, the committee is involved in developing procedures for market analysis and consumer acceptance of each new crop. The floral industry would like to do more. But as I pointed out earlier, it is an industry of small businesses that cannot afford independent research. With the facility at Beltsville already geared to this sort of research, and the enormous amount of support our industry has already provided, we would like to know that our research is being conducted in facilities that can offer the environmental conditions required to collect solid reliable research results.

The total plan for modernization facilities at Beltsville involves construction of a 50,000 square foot growth chamber facility at a cost of $15 million and a 54,000 square foot greenhouse facility at a costs of $10 million.

However, in view of the many budget cuts that have resulted from Gramm-Rudman, we are asking that only the first stage of this renovation project be funded at this time. We request $965,000 be budgeted in FY87 specifically for renovations to the Beltsville Florists and Nursery Crops Laboratory greenhouse structures where research is being conducted by the Laboratory for our industry.

This new modernization plan would include four of the 40 x 80 foot sections. Cost for the one section would be $300,000. The three other sections would cost $150,000 each. All of these greenhouses are at the West-side location.

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MONDAY, APRIL 14, 1986.

AGRICULTURAL PRODUCT DEVELOPMENT CENTER

WITNESS

LEE R. KOLMER, DEAN, COLLEGE OF AGRICULTURE, IOWA STATE UNIVERSITY

Mr. WHITTEN. We now will hear from Dean Lee Kolmer, Iowa State University.

Mr. Smith wishes to introduce you. He is a long time member of this Subcommittee. He has got a whole variety of interests here, and his interest in agriculture has not dimmed a bit.

Mr. SMITH. Well, thank you, Mr. Chairman, for saying that, and Dean Kolmer is from Iowa State University, which I am proud to say is in my district.

And we also have a letter addressed to you from our colleague, Cooper Evans, who is very much interested in what Dr. Kolmer is going to say. I hope that we can give serious consideration to the proposal that Dr. Kolmer is going to make, because we certainly have, we know it in Iowa, as well as Mississippi, and some other places, we have been increasing production in this country faster than we have found ways to get rid of the products. We need to do some more about finding new ways to get rid of these products, and to develop some new products to take the place of those that we are importing into this country if it is possible to do so.

So I am glad to see Dr. Kolmer here, Mr. Chairman.

Dr. KOLMER. Thank you, Mr. Smith, and Mr. Chairman, I agree with you. Mr. Smith's interest in agriculture has not waned.

Mr. WHITTEN. We agree fully.

Dr. KOLMER. He continues to be a champion of Iowa and agriculture, and we much appreciate that out in the State of Iowa.

I speak as a representative of Iowa State University and its agricultural scientists, and I appreciate the opportunity to talk to you about a realistic way to address some of the severe economic difficulties that we have in agriculture.

I am challenged, and I challenge you to do justice to a plan for substantial economic growth in major agricultural areas of the Nation. This Nation must recapture export markets. And it must broaden all markets for farm products, and also it must expand its employment base in rural areas.

To accomplish goals, and to achieve widespread benefits throughout the economy, we must do a better job of turning raw agricultural commodities into food and industrial products for domestic and foreign markets.

We propose the establishment of a national research and development center specializing in agricultural products for food and for industry. In such a center we will bring scientists from disciplines throughout the universities into research teams that can address one of agriculture's most urgent needs. The center will have three areas of focus.

One focus will be crop and animal modification. Here we will combine the best of traditional breeding research with the newest tools of biotechnology. We will modify existing crops, and develop alternative crops for farm production, and we have done some of that. These will be the sources of valuable new products for food and industrial uses.

The second focus will be product and process development. In this area multidisciplinary teams will develop better processing systems, and competitive new food and industrial products.

New preservation techniques, for example, can open the doors to remote markets where we cannot sell perishable products at present. And biodegradable plant materials have the potential to replace fibers, films and other plastics now produced from petroleum.

The third focus will be systems development. It will encompass all of the factors that must mesh in each successful new enterprise. That is, appropriate markets, satisfied buyers and profitable growers, processors and distributors.

For the fastest possible progress the efforts I have just described should be coordinated at one location, where teams of scientists can focus on well defined objectives. Iowa is the right location for these efforts. The State has been hit particularly hard by the farm depression.

One response at Iowa State University has been to shift resources and emphasize research on adding value to agricultural commodities. The payoff began quickly, because strong existing programs provided a launching point for new efforts.

Our Meat Laboratory became the foundation for the Meat Export Research Center. In two years, the Center has produced innovative processing techniques, new meat products, new markets for meat products, and a computer model of the Japanese livestock and meat sectors.

Another strong foundation is our team of crop and animal breeders. They are pacesetters in genetic improvement. Their expertise is as valuable to agri-products development as it is to farm production. A national center would increase their opportunities to work with biotechnologists, food technologists and chemical engineers, food engineers, and other specialists in developing raw materials to meet emerging requirements for food and industrial products.

We have a history of enthusiasm for interdisciplinary research. When the Legislature established the Food and Industrial Crops Processing Center, interdisciplinary teams were formed even before we had facilities available. This Center and the Meat Export Research Center represent two substantial Iowa investments in research on agri-product development. These centers would be the hub of activity in the national center.

Also crucial to the proposed center is expertise in market studies and trade policy analysis. Again, we have that expertise in our Center for Agriculture and Rural Development and the Food and Agricultural Policy Research Institute.

The groundwork is in place for such a center, thanks to the support of Iowa taxpayers and producers. The missing element is a modest amount of Federal support.

We know that the Federal budget is severely strained. Each allocation of resources is scrutinized carefully. But we are confident that this proposal can stand strong under such rigorous examination.

An initial investment of $10 million by the Federal Government will set the National Center for Food and Industrial Agricultural Product Development in motion. It will mark the beginning of a focused national effort that will attract partners from State government, manufacturers and processors, and farm and commodity organizations. The need is great, and the cost is modest. The payoff will be regained strength in agriculture, a productive partnership between public and private interests, and an investment in technological leadership for U.S. agriculture throughout the world.

I thank you for the opportunity.

Mr. WHITTEN. Thank you very much for your appearance, and as I stated, this is a difficult time to come up with something new. We do appreciate the interest and emphasis made by the University on this, however.

As I mentioned earlier, there is a new Senate rule, which provides that, if they put anything in, they have to cut something else out. We have run into that in the conference recently.

But we appreciate your appearance, and we appreciate the interest you have in this.

Dr. KOLMER. Thank you.

Mr. SMITH. Mr. Chairman, I just wonder what interest has been shown by private organizations, and by the States, in putting up money for this?

Dr. KOLMER. Well, the State is. In the last two years, they have established the food industrial crops processing in the Meat Export Research Center, and have appropriated special moneys for the operation of those centers.

Mr. SMITH. What about private industry?

Dr. KOLMER. Private industry, we have had numerous contributions, such as in the food crop and industrial processing, a $40,000 extruder as a gift from a company. We have—I do not know exact amounts, but a substantial amount of equipment that has donated in both——

Mr. SMITH. Do you have a ball park estimate as to how huch private industry and the State would put up, if the Federal Government puts money up?

Dr. KOLMER. The corn growers, the pork producers, and soybean growers have put up in the neighborhood of between three and $400,000. I would say in the neighborhood of a half a million or more in equipment contributions, and approximately now, between four and $500,000 a year, somewhere in that neighborhood, of operating money for this Center at this stage. Besides, of course, the hardware and the farm buildings, and so forth.

Mr. SMITH. How long do you think it would take you to pay off, I mean, can you give us any indication?

Dr. KOLMER. I think it would be quite rapid. I mentioned the products in the last two years, one product we have worked on in the Meat Export Research Center is animal blood for food use, for aid in the export market. One company has informed me that our work with animal blood, and decolorizing the red faction of beef blood has resulted in 25 jobs in their community, and a very substantial, something well over a half a million dollar increase in sales for them. They are expanding plant, and looking at ways of gathering pork blood.

Mr. SMITH. So you do not see this as long-term research, really. We are talking about something to pay off fairly fast.

Dr. KOLMER. It has both long-term and short-term implications. The plant and animal modification, the use of starches, and other parts of the corn plant, as a replacement for some plastics and biodegradable products may take somewhat longer. But there are some short-term benefits that are substantial.

Ground bacon, which was developed in our Meat Laboratory, that McDonald's uses, is estimated by the industry to add three cents a pound to thin bellies, which are underutilized and discounted heavily in the marketplace. It does not take too much to make up——

Mr. SMITH. I assume this would include work on soybean oil, which has certain problems with it.

Dr. KOLMER. Right. I think soybean oil breeders, and biotechnologists and food technologists work together, has great potential. Food technologists and breeder working together have bred a low leinolenic acid soybean oil. Right now it is more adaptable to some of the Southern States than the North Central States, but we are working on that.

More recently, they developed a soybean that produces a high steroid oil, that is, it is solid when it is extruded. So it has quite a few uses.

Mr. SMITH. It would be much easier to market then, much cheaper to market?

Dr. KOLMER. It is attractive to countries that do not allow hydrogenation of soybean oil in their food products, for example. But I think also that there is potentially a very large payoff for a conversion of raw material, agricultural raw material into industrial products, to substitute for some of the imported materials, and things like that.

Mr. SMITH. I have some more questions, but I will submit them.

Mr. WHITTEN. Thank you very much for your appearance.

Dr. KOLMER. Thank you, sir.

[Dr. Kolmer's full statement follows:]

Testimony to the Agriculture, Rural Development and Related Agencies
Subcommittee on Appropriations
April 14, 1986
Lee R. Kolmer, Dean, Iowa State University College of Agriculture

Good afternoon. Thank you for this opportunity to testify about a realistic way to address the severe economic difficulties in major U.S. agricultural sectors. I am Lee Kolmer, dean of Iowa State University's College of Agriculture. I speak as a representative of Iowa State and its agricultural scientists. I am challenged and I challenge you to do justice to a proposal that points the way to substantial economic growth in major agricultural areas of this nation.

For widespread benefit throughout the economy, we must do a better job of turning raw agricultural commodities into food and industrial products for domestic and foreign markets. We propose the establishment of a national research and development center specializing in agricultural products for food and industry. The center will greatly enhance our efforts to bring scientists from other colleges into teams that can address one of agriculture's most pressing problems. It will have three areas of focus.

1) **Crop and animal modification** will combine the best of traditional breeding research with the newest tools of biotechnology. The goal will be to diversify and improve raw materials. As an example, the potential to modify existing crops to produce oil and other products with unique characteristics useful in industrial processes and food processing is enormous.

2) **Product and process development** will combine food technology, chemistry, fermentation techniques and process technology--just to name a few important areas. The result will be better processing systems and competitive new food and industrial products from renewable agricultural resources.

New preservations techniques, for example, can open the doors to remote markets where we are not able to sell perishable products at present. And biodegradable polymers from plant materials have the potential to replace fibers, films and other plastics now produced from petroleum.

3) **Systems development** will span the range of factors that must mesh in a successful new enterprise that meets the requirements of buyers and is profitable for growers, processors and distributors.

The United States has become too dependent on sales of raw agricultural products. U.S. agriculture is operating in the mode of an underdeveloped country, depleting natural resources and shipping job opportunities out of the country. For the fastest possible progress in making better use of our unparalleled agricultural production system, the efforts I have just described should be coordinated at one location. It should be a location where the expertise of scientists in many fields can be focused on a central objective, that objective being to broaden domestic and foreign markets for our farm output by providing new agri-products for food and industry.

Iowa is the right location for these efforts. The state has been hit particularly hard by the farm depression. One response by the university has been to shift resources to emphasize research on ways to add value to agricultural commodities. The payoff from such shifts has already begun and was greatly enhanced because of existing programs that provided a launching point for new efforts.

Iowa State University's Meat Laboratory became the foundation for the Meat Export Research Center (MERC). After just two years, the Meat Export Research Center can claim numerous achievements including innovative processing techniques, new meat products, a computer model of the Japanese livestock and meat sectors and new markets for meat products. Like the Meat Lab, MERC is earning national and international respect for its programs in research, development and technology transfer.

Another strong foundation for our new efforts is our existing team of crop and animal breeders. They have earned respect as pacesetters in crop and livestock improvement. Their expertise is as valuable to new research on agri-products development as it is to production-oriented research programs. A national center would increase opportunities for plant and animal breeders, biotechnologists, food technologists and other specialists to collaborate on the development of crops and livestock that meet emerging requirements for food and industrial products.

And, speaking of such collaboration, another of our existing strengths is a history of enthusiasm for interdisciplinary research. When the Iowa Legislature established the Food and Industrial Crops Processing Center, interdisciplinary, task-specific teams formed even before facilities were available. This center and the Meat Export Research Center represent two substantial Iowa investments in research on agri-product development. The centers will be at the hub of activity in the proposed national center. Also important to the success of the proposed center is the capacity for market feasibility studies and trade policy analysis. Again, Iowa has an internationally respected unit conducting such analyses. Information provided by ISU's Center for Agriculture and Rural Development is in heavy demand at state and national levels.

The groundwork is in place, thanks to the support of Iowa taxpayers and producers. An unusual combination of expertise in essential areas makes Iowa the setting for the fastest possible progress in developing agricultural products for food and industry. The missing element is a modest amount of federal support.

We recognize that the federal budget is severely strained, and each allocation of resources must be scrutinized carefully. We scrutinize our programs in the same fashion, and we are confident that this proposal stands strong under rigorous examination. It outlines a sound investment in the future--a realistic approach toward building strong, profitable farms and agribusinesses that will contribute significantly to our national economy.

An initial investment of $10 million by the federal government will set the National Center for Food and Industrial Agricultural Product Development in motion. It will mark the beginning of a focused national effort that will attract partners from state government, manufacturers and processors, and farm and commodity organizations.

This nation must recapture export markets. It must broaden all markets for farm products, and it must expand the employment base in agricultural areas of the country.

The need is great. The cost is modest. The payoff will be regained strength in agriculture, thanks to a productive partnership between public and private interests. The future of U.S. agriculture depends on its technological leadership in the world. It is time to invest in that future.

MONDAY, APRIL 14, 1986.

TEHACHAPI WATERSHED PROJECT

WITNESSES

HON. WILLIAM M. THOMAS, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA.

KARL BACKES, PRESIDENT TEHACHAPI-CUMMINS WATER DISTRICT

GENE. LUNDQUIST, KERN COUNTY WATER AGENCY

Mr. WHITTEN. We turn now to our colleague, the Honorable William M. Thomas.

We are glad to have you here with your associates.

Mr. THOMAS. Thank you, Mr. Chairman.

Mr. WHITTEN. We will be glad to have you present them.

Mr. THOMAS. Before I begin, Mr. Chairman, I would like to introduce Marge Wilson. She is a case worker in my district office, and she wanted to come here and see how the least productive side of the office operates. She is 75 years young.

Marge, why do you not stand up.

[Applause.]

Mr. WHITTEN. We are glad indeed to have you here.

[Applause.]

Mr. THOMAS. With me, Mr. Chairman, is Karle Backes, who is the President of the Tehachapi-Cummings Water District, and Gene Lundquist on the Board of Directors of the Kern County Water Agency.

I appreciate the opportunity to comment on funding for Soil Conservation Service small watershed projects, and I would ask, Mr. Chairman, unanimous consent that I would submit my written testimony in its entirety for the record, and present only the key points, that I want to spend with you.

Mr. WHITTEN. We will be glad to have that done.

Mr. THOMAS. Thank you, Mr. Chairman.

First of all, I would like to thank the Chairman for his speedy response on March 18th to my letter regarding this project, I appreciate the rapidity of the response.

The Tehachapi Watershed project is in my district, and it is a project which has a great amount of agreement between the local agencies and the Federal Government, in fact, there has been $350,000 already spent by the locals, as a matter of fact, $100,000 on my right here, and the $250,000 from other local projects. it is an overall $8.5 million project, and it is already under construction. It is absolutely vital to the area.

We have had a number of very serious floods that come out of the canyons, flood agricultural land and moving large boulders, and then move right on into the floodplain, where the City of Tehachapi is, and an important railroad runs right through there, it is the one that goes over the Sierras, and it has been flooded out, and there has been loss of lives over the years.

So this project is one that has been looked forward to for a long time by the people in the area. The Federal Government has already spent $2.5 million on the project, at least after April 15th, they will have spent $2.5 million.

There are a number of components to the project. One of which is the Antelope Dam, and with these current funds released the dam will be completed. That is about 30 percent of the project. We need additional canals, and up the canyon, a smaller dam. Without all of those components in place, it simply will not do the job that it was designed to do. And it is a very high priority project in California, second, I believe.

But—and I guess the last thing I want to say is that I share with the Chairman the concerns about fiscal situation that we are in. And that obviously, in terms of future projects, we have to watch very carefully how we spend our money, but this particular project the Federal Government has already spent a sizable amount of money, and the local people have an agreement. They thought that there was a local-Federal commitment, and the last thing we probably want to do is not to carry out those commitments that we already have established.

So I appreciate the Chairman's understanding that this is one of those projects that we simply do not want to waste the Federal money already spent, and we will work together in terms of scrutinizing future projects, in terms of whether or not we can fund them.

I thank the Chairman.

Mr. **Whitten**. Thank you very much. I appreciate your statement.

[Mr. Thomas' statement follows:]

Statement of the Honorable
WILLIAM M. THOMAS
Member of Congress, 20th District of California
Subcommittee on Agriculture
House Committee on Appropriations

Mr. Chairman and Members of the Subcommittee, I appreciate the opportunity to comment on funding for Soil Conservation Service small watershed projects, and particularly, the Tehachapi Watershed Project, which is in my congressional district.

Earlier this year, the Administration recommended a series of funding rescissions and termination of future funding for small watershed projects. While I applaud the President's effort and commitment to reduce the federal deficit, I cannot agree with plans to end funding for the Tehachapi project.

First of all, I would like to thank the Chairman for his speedy response on March 16 to my letter regarding this project. I understand the Committee does not plan to act on rescission legislation, meaning 1986 funds should be available this month. However, more work remains on this project, as I wish to make clear.

The Tehachapi Watershed Project is located in Kern County, approximately 35 miles from Bakersfield California. This watershed project, which is the subject of an agreement between local project sponsors and the federal government, is an $8.5 million project, of which $8 million is to come from the federal government. The project is already under construction and is vital to prevent future flooding damage to the Tehachapi area.

A major problem in this watershed is flooding of agricultural and urban land, accompanied by erosion and sedimentation. Following high-intensity rainfall, flood flows come from the mountain canyons along the south side of the watershed. Damaging flows come primarily from the Antelope and Blackburn Canyons. Water originating in the steeper reaches of those areas flows across agricultural land, depositing sediment and boulders and destroying crops. It then passes through the town of Tehachapi, flooding homes, businesses, roads, and the railroad. The project will reduce flood damage in the city of Tehachapi and on about 3,200 acres of agricultural lands. Past floods have caused millions of dollars in damage and the loss of several lives.

The project has the strong support of county and local governments. Local agencies have already spent $350,000 of their own money on its development. The federal government has already spent $2.5 million on the project. If continued federal assistance is not provided, that money will have been wasted.

Current fiscal year funds, once released, will see the completion of the Antelope Dam segment of the project. With this segment, 30 percent of the project will be finished. An additional dam in Blackburn Canyon and other work must be finished if the Tehachapi watershed project is to meet flood protection goals. The entire project is scheduled for completion in 1990. I want to emphasize that all components must be completed to provide adequate flood protection. To maintain progress on the Tehachapi project, $1.3 million in fiscal year 1987 funds will be needed to remain on schedule. I might add that the Tehachapi Watershed Project is one of the top priority projects in California, according to the state office of the Soil Conservation Service.

In closing, I also want to address the more general question of how to handle projects such as this one in the future. Where local governments have already committed substantial amounts of money and where agreements have been reached with the federal government on construction of this type of flood protection, projects should be completed. While it may be appropriate to limit funds for future projects, by all means the federal government should fulfill its outstanding commitments on projects already under construction. Not to do so would send a terribly disheartening message to American citizens. The citizens of this country need to know that our government lives up to its legal and financial commitments.

Mr. WHITTEN. Mr. Backes, do you have a further statement?

Mr. BACKES. No, Mr. Whitten, except to express our appreciation for the opportunity to come down here and encourage you to support our program.

Mr. WHITTEN. We appreciate that. What bothers me a whole lot is that many people do not seem to realize that we better do something about this water situation.

What is happening, the water table is dropping, because the water is running off the surface, and going out to sea. Since I have been here I have become familiar with most areas of the country. I have been in California, and just about every section.

But the floods that we have had in the South, and everywhere else, are getting worse. Maybe it is raining more, but really it is because more and more land is going under concrete. We have got trees that are being killed, and we have fires, and all that. Yet the 1987 budget would abolish the watershed program.

I am proud of this program—way back when I first came here, we had the Flood Control Act that was passed, and districts were promised some type of watershed protection. We had about seven old watersheds that had been created but not treated. So way back in that period I went before the Democratic Convention, and got them to put watersheds in their platform.

Eisenhower was elected, and Carl Anderson from Minnesota became Chairman. I was Ranking Member. He and I worked together very closely. So we set up 63 pilot programs throughout the country' to show the value of watershed protection and flood prevention.

Following that, the President vetoed a public works bill, and we finally overrode it, using the argument that, whatever our problems were, we better look after our own country.

About two years ago we finally got a joint program, where the Corps of Engineers and Soil Conservation Service can work together in both the watersheds and the flatlands.

I think it is evident that we need to give attention to watersheds now. What we can do, and how we can go about it, I do not know. We will have to see what we can do.

While OMB tries to cut it out, watershed work is one thing that we cannot afford to cut out. You just simply cannot handle floods, if you let it get out of hand. And you have got so many areas where you build up the hillside, and where there is mud flowing all over. I do not know of anything that is more necessary, for two or three reasons. First is protection of property and lives. Second is the need to let the water go in the ground, because the water table is dropping rapidly, in many sections of the United States.

So we are going to study this very closely. I do not know what we can do, we will have to look and see, because of the Gramm-Rudman bill and the various other things. But I have always said you better look after your own country, because that is what you have to look to to support all the rest of these things.

Mr. THOMAS. Mr. Chairman, I look forward to working with you on this, and especially since the Government has already committed two and a half million dollars. We have a dam 30 percent completed, almost 50 percent completed, we would like to try to finish that.

Mr. WHITTEN. Well, it is like a house. You cannot let the foundation go. You might let a leak in the roof go. But we better take care of the basic country.

Thanks a whole lot.

Mr. BACKES. Thank you very much, Mr. Chairman.

[Statement of Karl M. Backes follows:]

Testimony supporting Fiscal Year 86-87 Funding for Small Watershed Act Programs

by Karl M. Backes

on behalf of
Tehachapi-Cummings County Water District
Tehachapi, California
and
Kern County Water Agency
Bakersfield, California

before the
U.S. House of Representatives Committee on Appropriations,
Subcommittee on Agriculture, Rural Development, & Related Agencies

Honorable Jamie Whitten, Chairman

April 14, 1986

Mr. Chairman:

My name is Karl M. Backes, and I am president of the Tehachapi-Cummings County Water District. With me today is Gene A. Lundquist, a director of the Kern County Water Agency. We are here before you today to urge your support for restoring Fiscal Year 86-87 funds in the Department of Agriculture's Soil Conservation Service programs. Our specific concern is the P.L. 566, or Small Watershed Act, programs, and the Tehachapi Watershed Project in Kern County, California.

In addition to the Tehachapi-Cummings County Water District and the Kern County Water Agency, Tehachapi Watershed Project sponsors include the Tehachapi Resource Conservation District and the City of Tehachapi. To date, these local sponsors and taxpayers have spent about $350,000 on the project, while the Federal Government has already spent $2.5 million. After work funded by the current fiscal year budget is finished, the Tehachapi project will be about one-third complete, with the Antelope Dam component of the project finished. The Fiscal Year 86-87 funds will be used for construction of flood channel and diversion facilities.

To stop this project at this point, as proposed in the President's Budget for Fiscal Year 86-87, would leave it partially completed and of absolutely no use or benefit to anybody. Worse, such an action would also literally throw away almost $3 million.

A $230 million allocation is needed to continue the Soil Conservation Service's nationwide watershed and flood prevention projects on schedule. To maintain construction schedules for Congressionally-authorized P.L. 566 projects in California that are already under construction, a $6 million allocation for Fiscal Year 86-87 is needed. Of that amount, $1.3 million is needed for the Antelope Channel and Diversion component of the Tehachapi Watershed Project. The Tehachapi Watershed Project has a strong benefit-to-cost ratio of 1.3 to 1, and is considered one of the top priority projects in the state by the California Soil Conservation Service office.

I would like to take this opportunity to express our appreciation for your long-time support of the Soil Conservation Service and its watershed protection programs. These projects have proven to be among the most beneficial and cost-effective in the nation, providing real service in areas of real need.

We urge your continued support for the national Soil Conservation Service watershed protection programs, and specifically to restore funding to at least complete those projects already under construction. If they are not completed, no benefit can be realized from the considerable local and federal expenditures that have already been made.

MONDAY, APRIL 14, 1986.

DAIRY PRODUCT RESEARCH AND EXTENSION

WITNESS

EDWIN FRY, SECRETARY-TREASURER, NATIONAL DAIRY HERD IMPROVEMENT ASSOCIATION, INC.

Mr. WHITTEN. Mr. Edwin Fry.

Mr. Fry, you have got a rather lengthy statement. We would be glad to see that all of it goes in the record, and have you touch the high points.

Mr. FRY. That is my desire, Mr. Chairman.

Mr. WHITTEN. How many cows have you destroyed under this new program?

Mr. FRY. I put in a bid, Mr. Chairman, but it was not accepted.

Mr. WHITTEN. Well, you know, you have to do the best you can—and this is not critical of the legislative committee, because they have members with differing viewpoints. I do not see how they did as well as they did, with all of the cross currents they have.

But the big part of our dairy problem is that we do not make the products available to the rest of the world, which is hungry, and needs our food.

Mr. FRY. Well, that is one thing that I would like to address, because marketing efficiency, and product development efficiency is part of our problems.

And as you have suggested, I have already decided I am not going to do any reading. I am going to try to touch the high points, and I am a dairy farmer from Maryland, the Eastern Shore of Maryland, and I am real proud of that.

I serve as the Secretary-Treasurer of the National Dairy Herd Improvement Association, which represents 64,000 dairy farmers. We have a close working relationship with the Federal Government through the Cooperative Dairy Herd Improvement program, and the computerized farm management data that we develop is used for genetic evaluations by USDA, it is used for basic and applied research and educational programs in our Land Grant institutions.

I am most concerned about the way, the development of our research programs, and a buzz word on my farm, and everywhere else is efficiency. We have got to have more efficiency, and I have heard you talk about it in the last hour, a half a dozen times. And in the dairy industry we are looking for more efficiency in marketing and product development.

In my statement I have four areas that are worthy of addressing. One is reinstatement of the Extension Service budget to reasonable levels to provide a service. One is funding for dairy product research and for processing and distribution efficiency. Developing policies which will encourage expansion of dairy product markets, including higher minimum standards for the milk that is sold in this country, and component pricing of our product.

And lastly, continued support for research which leads to improved production efficiencies, including research efforts in mastitis control, reproduction and genetic improvement.

I would first like to address the Extension Service, and we all know we have to cut the Federal budget, and I think that is being proposed by the Administration is unconscionable in the Extension Service. They have had a long, successful experience in serving as an information provider, a resource and advisor and consultant to agriculture.

Much of the success in agriculture, as you well know, coming from Mississippi, is attributed to the counsel from the Extension Service, and getting information out from the Land Grant Colleges. And I believe fully it is the best source of unbiased information that the farmer can get.

And if we cut the Extension Service out, I do not know who we are going to count on to disseminate the information from our research institutions, both USDA and the Land Grant colleges that we count on so heavily nowadays.

But I think the Extension needs to address itself, and be ready to make some changes. They have got to cut personnel out. And they need to recognize that there is a need for a national electronic technological communications, that they are not prepared to handle, and I am afraid that if they do not get geared to handle it, somebody is going to do it for them, and we are going to lose this unbiased source of information.

I think there are commercial networks that would welcome the Extension as an information provider, and these networks would probably pay for this information. I think we need to develop this information, the technology on a national, coordinated level, and not make individual States go it alone, as being done so much right now.

The second area that I would like to address is that the Extension needs to address itself back to agriculture' and not try to be all things to all people, gaining its reputation by being the right hand of the farmers, helping us to move into the age of technology, assisting the farm wives in becoming business managers, and helping the 4-H, like myself, become better citizens, help produce the food and fiber of this country.

And I feel that by expanding out into all the urban areas, the Extension is losing its base of support, and it is proliferated beyond that agricultural base.

A few comments about product research. Product research in the dairy industry will help not only the dairy farmer, but it is going to benefit consumers and the entire industry. On page six I have listed eight items that we consider high priority research project needs. And I would urge your consideration of those needs.

The U.S. Department of Agriculture has indicated a willingness to support product research, and we appreciate this support, because it is in the best interest of all Americans.

Lastly, I would like to mention three areas of production efficiency research. Just because we have an oversupply of milk is not cause and reason to stop doing research on improving our efficiency, because it is going to take this efficiency to put us back into the world market.

Mastitis research is our primary concern. It is costing myself and other dairy farmers a billion dollars a year, loss in productivity from our animals.

Reproduction research is another important area, and we have had a program by the USDA, integrated reproduction management, was put on under sale a couple of years ago, and the funds are being cut completely from that program.

And thirdly, genetic research. We get strong support from the U.S. Government through the Animal Improvement Laboratory in Beltsville for genetic evaluation, and this continued research will make important progress in the development and agriculture.

I appreciate your time, Mr. Chairman, and if you have any questions I would be glad to try to answer them.

Mr. WHITTEN. Well, I live within the Memphis, Tennessee milkshed, so I have dealt with it back through the years. We all are aware that this surplus for domestic needs. Some butter was sold some years ago to Russia, by letting New Zealand sell it, and make the profit, by changing it over to butter oil.

I notice now that, with the new program, we have a Dutch dairy group that wants to come into Georgia——

Mr. FRY. It is Irish. It is an Irish dairy.

Mr. WHITTEN. Irish.

Mr. FRY. That is correct.

Mr. WHITTEN. I am sure you have taken notice of that, and I do not know what we have nationwide—and it bothers me. Just about every new factory in my area is Japanese-financed. They make the parts over there and send them over here, and let our people put them together.

Mr. FRY. That is right.

Mr. WHITTEN. The foreign automobile industry is coming over here. We buy a billion dollars worth of things, on credit, that we could make for ourselves. Take steel—if you can buy Japanese steel cheaper than U.S. steel—perhaps you will make money. But from the country's standpoint, you get rid of your money, and you get your jobs. But, if you bought it here, you would have your steel and your money and your jobs.

Well, the way we are going we must begin to do those things we can do for ourselves, or so it looks to me. And it looks like the present recommendations, in dairy and everything else, we are just going to dry up the domestic industry.

Mr. FRY. Well, I would like to——

Mr. WHITTEN. We are holding our milk here so New Zealand can have the markets. We are doing this by buying on credit, and we are running a trade deficit of about $140 billion a year.

Do you know the answer? I certainly do not.

Mr. FRY. Well, one last thing about the Irish outfit coming into Georgia, is they have got to buy American cows. They cannot bring the cows in, certainly. And it takes two years to get a cow, no matter what they do. They cannot make her out of magic.

Mr. WHITTEN. You are like me—you are worried about the next two years, are you not?

Mr. FRY. And the other thing is, I like to refer to it, we do not have an oversupply of milk, we just have an under consumption.

We do need to buy new products, and I think that if we do not maintain our efficiency, and improve in our efficiency, we are going to be just like the steel industry.

Mr. WHITTEN. Well, I would like for you to be objective. But one of the problems that you have about making money in dairying—and folks have made and do make money in it—just about the time you meet all the official requirements, they come up with another one. So you just cannot keep current with the demands made on you by the various Departments of Government. Sometimes a little politics gets involved.

I was here when you could not ship milk from Wisconsin very far, because you had to do it within a very few hours.

Mr. FRY. Right.

Mr. WHITTEN. Well, the highways got better, and the trucks moved faster, so they changed their requirements. So all of that is a fact of life. But, we appreciate your appearance here, and your statement.

Mr. FRY. Well, thank you very much.

Mr. WHITTEN. That is all.

[Mr. Fry's full statement follows:]

April 14, 1986

STATEMENT TO THE HOUSE OF REPRESENTATIVES APPROPRIATIONS SUBCOMMITTEE ON AGRICULTURE, RURAL DEVELOPMENT, AND RELATED AGENCIES

HONORABLE JAMIE L. WHITTEN, CHAIRMAN

(Concerning Funding for the United States Department of Agriculture
in the Fiscal 1987 Budget for Extension,
Dairy Product Research, and Dairy Production Research)

SUMMARY

I am Ed Fry, Secretary-Treasurer of National Dairy Herd Improvement Association, Inc., which represents 64,000 dairy farmers enrolled in the National Cooperative Dairy Herd Improvement Program.

National Dairy Herd Improvement Association believes it is in the best interest of dairy farmers, taxpayers, and government to continue support for the Extension Service, dairy product research, and dairy production efficiency research. National DHIA, the dairy industry, and the Forum for Animal Agriculture encourage "product research and distribution research" as the highest priority dairy research. The events of the past year continue to demonstrate the dairy industry needs to expand its markets by developing new products, improving its efficiency in distributing products, and abandoning the obsolete marketing practices which encourage the production of water and butterfat.

On the other hand, production efficiency should not be permitted to stagnate by abandoning production efficiency research. Eventually, dairy farmers in the United States need to become so efficient they can compete in the world market.

We believe reductions in Extension Service budgets for fiscal 1987 were unnecessarily severe and come at a time when farmers can ill-afford to lose the assistance of Extension. However, we also encourage the Extension Service and extension system to organize for the needs of the 21st century by setting reasonable priorities, adopting national electronic information technology, focusing on "whole-farm" education, redirecting limited resources and limiting its activities to its base of support in agriculture.

We ask your consideration of the following efforts which contribute to the efficiency of the dairy industry:

(a) Funding for dairy product research and processing/distribution efficiency;

(b) Policies which encourage expansion of dairy product markets, including higher minimum standards and component pricing;

(c) Continued support for research which leads to improved production efficiencies, including research efforts in mastitis control, reproduction problems, and genetic improvement;

(d) Re-instatement of Extension Service budgets to reasonable levels.

STATEMENT

I am Edwin Fry, Chestertown, Maryland. Our family corporation operates Fair Hill Farms at Chestertown. We farm 3,600 acres of land and milk 760 registered and grade Holstein cattle. I am Secretary-Treasurer of National Dairy Herd Improvement Association, Inc., (National DHIA), which represents 64,000 dairy farmers enrolled in the National Cooperative Dairy Herd Improvement Program (NCDHIP). The NCDHIP provides computerized dairy farm management data; the program is the basis for national genetic evaluations; it provides information for sound artificial insemination and breed improvement programs. It is the basis for many research and education programs. We appreciate the support of the U.S. Department of Agriculture in these programs.

For several years, dairy farmers in National DHIA have urged a redirection of funding to support dairy product research to improve per capita consumption of dairy products. In addition, the dairy industry and the Forum for Animal Agriculture (an alliance of 24 livestock organizations representing dairy, beef, swine, sheep, horses, poultry, dairy goats and small meat animals) have been on record supporting "product research and distribution efficiency" as the highest priority research. In the long run, along with the whole-herd buy-out, government expenditure for research to expand markets is much more rational than purchase of surplus products.

Even with improvements in marketing efficiency, dairy farmers must continue to improve production efficiency. Eventually, dairy farmers in the United States need to become so efficient they can compete in the world market.

We believe reductions in Extension Service budgets for fiscal 1987 were unnecessarily severe and come at a time when farmers can ill-afford to lose the assistance of Extension. However, we also encourage the Extension Service and extension system to organize for the needs of the 21st century by setting reasonable priorities, adopting national electronic information technology, focusing on "whole-farm" education, redirecting limited resources, and limiting its activities to its base of support in agriculture.

We ask your consideration of the following efforts which contribute to the efficiency of the dairy industry:

(a) Funding for dairy product research and processing/distribution efficiency;

(b) Policies which encourage expansion of dairy product markets, including higher minimum standards and component pricing;

(c) Continued support for research which leads to improved production efficiencies, including research efforts in mastitis control, reproduction problems, and genetic improvement;

(d) Re-instatement of Extension Service budgets to reasonable levels.

EXTENSION SERVICE EDUCATION PROGRAMS

We agree with Administration efforts to reduce federal deficits. We think the proposed cuts in the fiscal 1987 budget for Extension Service are unnecessarily severe. We hope Congress will consider re-instating much of the $203 million reduction.

Extension has long and successful experience in serving as an information provider, resource, advisor and consultant to agriculture. Much of the success of agriculture is a tribute to its counsel. However, as the future of Extension is considered, we believe there is an opportunity to study an appropriate role for Extension as it attempts to prepare for the 21st century. We are convinced there is need for greater national coordination, a re-evaluation of Extension priorities, and an overhaul of the Extension method.

(a) The Dairy Industry in the Year 2000

In order to identify priorities for Extension, one can study the characteristics of one segment of agriculture, the dairy industry, to gain clues. From dairy, one can extrapolate to the more general perspective of all agriculture. From that, one can identify the appropriate priorities and roles of Extension.

Today, there are 200,000 commercial dairy farms in the United States. These farms have 11 million cows. These are family farms. They average 37 cows per herd. Production levels average about 12,300 pounds of milk.

Dairy herd improvement (DHIA) enrolls 1/3 of the herds and 45% of the cows. DHIA production is 5,000 lbs. above non-DHIA. Herd size is 73 compared to 27. Three thousand DHIA employees go to the farm one day a month and record milk weights and other vital data by hand. Most of this work is done during milking. Milk samples move by refrigerated truck or UPS to about 70 DHIA component analyses labs for butterfat, protein, and somatic cell testing. The biggest lab handles 400,000 samples a month.

Farm data are sent by mail to one of nine regional DHIA mainframe computers; lab analyses are sent electronically. Inputs are merged at the mainframe and management information summaries .are prepared and mailed to the farm. All this takes 5-12 days, depending on locations and efficiency.

About 500 farms have varying degrees of computerization linked to DHIA regional centers, at this point providing sophisticated options and lists for day-to-day management. DHIA's electronic network, DAIRY NET, is not yet being used for routine DHIA transfer of data. It's a complex system, but it's cumbersome, too; and, dairy farmers increasingly want information instantaneously!

In 1985, Dr. Lew Mix at Agway confirmed National DHIA's 1990 study and went beyond. Mix projects 88,000 commercial dairy farms by 2000, with 7.8 million dairy cows. Production per cow will be at 16,000 pounds of milk, even if there is no somatotropin (growth hormone). It could reach 20,000 pounds of milk with 100% adoption of growth hormone. U.S. population will inch up to 260 million. Consumption should be up about 15%, but total dairy income probably may be no higher than it is now ($18 - $19 billion).

The world of the year 2000 will be one in which computers are everywhere, in tractors, in planters, in feeding systems, in milking systems and in farm offices. Milking regimens will include automatic electronic I.D. and body temperature. Farm computers will be linked to an electronic information and decision-aid network like DHIA's DAIRY NET. Daily management action lists will be the heart of management information systems.

DHIA will be integrated with computerization on the farm. Instantaneous management records will be specifically tailored to each farm. This long-term trend, already begun, to decentralize record computation foretells nine regional DHIA centers with 50,000 or more satellite computers on individual farms.

Component analyses, including butterfat, protein, lactose, and mastitis tests may be run "cow-side." Electronic DHIA labs have centralized from 1,000 labs a generation ago to 69 now. In the next generation, component analyses may decentralize. Decentralization means identifying cows, weighing and analyzing milk, and computing records, everything we now do in DHIA, will be complete before the milk cools off. Ironically, it is full circle from where DHIA started.

DHIA supervisors will be consulting technicians whose expertise is in monitoring sophisticated testing equipment and computer programs. DHIA's work force will be much smaller as automation cuts DHIA labor at the farm.

Whether DHIA survives or not, 88,000 dairy farmers will! Whether DHIA participates in the technological revolution going on the dairy industry or not, it's going to take place.

(b) Extension in the Year 2000

Exactly the same statements can be said for Extension. Whether Extension participates in the electronic information revolution or not, it's taking place. With or without Extension, it's going to happen.

To extrapolate from the specific to the general, it's obvious Extension's clientele, by the year 2000, will be smarter, better trained, high-tech, operating in fast-moving national networks, and expecting high-tech, profitable, and innovative answers from advisors, whoever they will be. This is the world Extension will counsel and advise.

DHIA conceivably may not move fast enough to have any impact on what performance testing and recording is in the year 2000. Extension may not adjust to the technological/computer revolution fast enough to have any impact on education and information dissemination in the year 2000.

If Extension will be an educator, an information provider, an advisor, and a consultant to agriculture, it must make some changes. Extension has plenty of competition, just as DHIA now does. Here is what realism dictates Extension should gear up for in the year 2000:

1. Electronic Information Information dissemination will be concentrated in national networks and national databanks. Extension needs to recognize the need for national electronic technological communications and contribute to their development. Individual states should not go it alone. Handbooks and fact sheets should become part of the electronic data base accessible with "key-word search." Commercial networks will welcome Extension as an "information provider," and, these networks may even pay for the information.

   Food Animal Residue Avoidance Databank (FARAD), funded by Food Safety Inspection Service at a level of $250,000 in 1986 is an example of a small working databank. Now, we learn funding has been dropped in 1987. It doesn't make sense.

2. "Whole Farm" Concept The integrated concept is excellent, but it needs to go electronic, too. "Decision-aid" software is a high priority, so a farmer can tell what a decision in corn growing means to the bottom line in the dairy enterprise, for instance.

"Decision-aid" software can be downloaded from that national data bank. Farmers are not going to go to the county agent's office to access it, either. Farmers in 2000 have their own computer.

3. Redirection of Resources Extension has 25% less budget (in constant dollars) than 20 years ago, but only 2% less employees. Administrators have taken operational dollars and shifted them to cover salaries. Extension can do a more effective job by using the new technologies, and it's equivalent to having more people.

Extension must get used to less employees and then give the employees the tools to be efficient. Electronic information, for example, is one answer. County agents may be obsolete.

4. Base in Agriculture Extension cannot be all things to all people. Extension's support is in agriculture.

Extension gained its reputation by being at the right hand of farmers as they have moved into the age of technology. Extension has helped farmers to be profitable by advising them how to make good decisions. Extension helped farmers' wives by teaching them how to be partners in the business of farming; and Extension 4-H worked with children of farmers getting them ready to be the next generation of producers and citizens.

Extension began to lose support when it proliferated beyond its agricultural base. Farmers and/or agriculture is the only base Extension has. Extension should get back to its agricultural roots.

In summary, Extension will be, like DHIA, a far different institution in 2000. Extension needs to:

(a) Develop information technologies with strong emphasis on national coordination;

(b) Provide the necessary technological tools to support Extension workers so each is as productive and efficient as possible; and

(c) Concentrate on agriculture.

PRODUCT RESEARCH

National DHIA continues to urge product research for a number of rational reasons:

(a) The nutritional well-being of children who increasingly are addicted to soft drinks;

(b) Assurance that the marketing system emphasizes quality and product salability;

(c) Development of new products to increase consumption of dairy products and reduce expenditures for storage of surplus products;

(d) Continued efforts to reduce cost of processing, storing, and transporting milk and milk products; and

(e) Benefits received by consumers as well as producers from product research.

Following is a listing of high priority research project needs:

(a) Genetic engineering to improve dairy products.
(b) Concentration of milk at the farm level.
(c) Ultrapasteurization and aseptic packaging.
(d) Ultrafiltration for yield improvement in cheese.
(e) Concentration of whey at its place of origin.
(f) Whey utilization for food and non-food.
(g) Milk quality uniformity.
(h) Milk fat utilization.

In recent years, the U.S. Department of Agriculture, faced with mounting surplus dairy products, has indicated a willingness to support product research. We appreciate this support and believe continued effort is in the best interests of farmers, consumers, and taxpayers.

PRODUCTION EFFICIENCY RESEARCH

Although production efficiency of the dairy industry far surpasses its marketing efficiency, efforts must continue to improve efficiency at the farm level. Research should continue, too, because there is a long lead-time from research initiation to farm adoption of new techniques. Dairy farmers hope Congress will continue to encourage maximum productive efficiency. Both farmers and consumers benefit.

Mastitis Research

Mastitis is the primary disease problem of dairy cattle (cost $1 billion annually).

Some believe mastitis control is merely an application of current knowledge, but dairy farmers believe only a small part of needed research has been completed. As herd size increases and mechanization/automation takes place, research and information are more essential than ever. As an example, DHIA dairy farmers pay for monthly mastitis detection on 3 million cows. Follow-up research and communication are essential to supplement the detection system.

The following mastitis research needs were developed by the National Mastitis Council:

1. **Milking Equipment and Mastitis**

   There are few reliable data defining characteristics of milking machines that influence incidence and severity of mastitis.

2. **The Dry Period and Mastitis**

   New methods of treatment and prophylaxis in the dry period are needed.

3. **Specific immunity and immunization**

   There is need for study of mechanisms of immunity and potential effective vaccines.

4. **Non-Specific Resistance**

   Resistance research areas include integrity of the teat canal barrier, to infection, phagocitosis in the mammary gland and various antibacterial factors in milk and dry period secretions.

5. **Integrated Mastitis Control Program**

Development of integrated mastitis control systems requires validation of management practices which minimize the incidence of clinical mastitis, the level of subclinical infection and production loss.

Reproduction Research

Dairy farmers consistently rate the needs for reproduction research second only to mastitis. Farmers rate reproduction research priorities in this order:

1. Estrus detection
2. Retained placenta
3. Cystic ovaries
4. Abortion-embryonic death
5. Reproductive disease (bruccellosis, leptospirosis, vibriosis, low-grade infection, etc.)

National DHIA and dairy farmers appreciate the response of the U.S. Department of Agriculture and the scientific community in developing the national project Integrated Reproduction Management so farmers have available a package which solves problems at the farm level. We encourage continued development.

Genetic Research

National DHIA appreciates the support of Congress and the U.S. Department of Agriculture in maintaining dairy research at the Animal Improvement Program Laboratory. Resulting dairy cattle sire and cow evaluations have contributed significantly to production efficiency progress in dairy. To ensure continued genetic improvement, DHIA dairy farmers encourage the continuation of this important research.

SUMMARY OF RESEARCH AND EXTENSION PRIORITIES

1. Re-instatement of Extension Service Budgets
2. Dairy Product Research/Processing-Distribution Efficiency
3. Mastitis Research
4. Reproduction Research
5. Genetic Research

TUESDAY, APRIL 15, 1986

APPROPRIATE TECHNOLOGY TRANSFER FOR RURAL AREAS

WITNESS

ROBERT J. GRAY, SENIOR ASSOCIATE/POLICY DEVELOPMENT, AMERICAN FARMLAND TRUST

Mr. **WATKINS**. First we have Mr. Robert J. Gray.

Mr. **GRAY**. Yes, sir.

Mr. **WATKINS**. First let me say I want to express the regrets of Chairman Whitten. As some of you may know, we had a death of one of our subcommittee chairmen on Appropriations, Joe Addabbo, and the funeral is today. And, Chairman Whitten, rightly so, felt he needed to be there. We would have liked to join him to pay our respects for our colleague.

Because of a lot of scheduled activities here on the Hill, we are here today. We feel it urgent that we continue this particular hearing.

Mr. Gray, as you know, your entire statement will be made part of the record. You can summarize and brief us on your comments.

Mr. **GRAY**. Thank you, Mr. Chairman, members of the subcommittee.

It is my privilege to testify this morning. I am Bob Gray, Senior Associate with the American Farmland Trust.

We are a private nonprofit organization here in Washington, D.C. with major interest in the land conservation resources issues.

We have 35,000 members nationwide across the country, and we have worked in a lot of states and local communities on land resources issues ranging from farmland preservation to soil conservation and other resource issues, as well.

One of the things that I think is important that I would like to stress to this subcommittee this morning is that many times private organizations, private nonprofit organizations such as the American Farmland Trust, have the capability of doing a great deal of analysis independently of the Federal agencies, and I think many times rather objectively.

To give you an example, I have spent the better part of the last three years analyzing the Federal soil conservation programs.

We received a grant from the Andrew Mellon Foundation in 1982 to take a look at the effectiveness of the soil conservation programs at the Federal level.

And we went out and not only analyzed the data that the Soil Conservation Service has gathered on this, but we also interviewed over 700 farmers in six different states to find out what they were thinking and doing on soil conservation.

We were able to come up with a report in 1984. We made a series of recommendations back to Congress. As a matter of fact, we had a request from the Subcommittee on House Administration, from Congressman Jones, Chairman of that subcommittee, for our organization to take a look at soil conservation programs.

We made a report back to Congress, and, of course, as you well know, the 1985 farm bill included a number of major soil conservation changes; as far as the conservation is concerned, I think significant changes.

I think they are going to make a lot of difference in the next decade of reducing soil erosion.

But my purpose in making that point is to talk about how that kind of information from the private nonprofit sector as well as from governmental agencies, local governments and so forth that we work with all the time, that have very good ideas and some do have good projects on their own—but many times, that kind of information doesn't get spread around enough around the country for other communities to use it or to take a look at it and decide whether they think it is effective and could be utilized at their own level.

My purpose in testifying today is to support an item that has been requested in the budget for ATTRA which is the Appropriate Technology Transfer for Rural Areas.

I think that this particular idea is something whose time has come because it is an opportunity to set up a center that will transfer this kind of technology.

Some of the things that I have just mentioned are beyond many other kinds of information that is available around the country.

Let me give you a couple of examples of other things that we work on.

We did a density related public cost analysis for Loudoun County, Virginia, which, as you know, has Dulles Airport included in that area.

What we were looking at in this particular community was looking at what the costs were for different densities of development for schools, roads, other kinds of public costs, water and sewer and so forth.

We were able to come up with a report for them that has proved very useful for some of the things they are doing in Loudoun County.

In addition to that, we are working on an off-site damage project in the State of Minnesota, in which we are assessing the cost of off-site damages to soil erosion, how much it costs for example, to remove soil from the ditches, and other costs that are associated with erosion.

But this kind of information and these kinds of analysis that are gathered many times by the private sector often times do not get spread out and do not get put out to other communities around the country.

So, I think that the idea of ATTRA is one that could prove to be very, very useful and very helpful to all rural communities across the country.

Number one, as you well know, our farmers are in very serious financial problems. They need all the good ideas in terms of cutting costs on their own farms they can receive.

And in addition to that, with the lessening of the Federal budget, many of our rural communities and counties are going to have to deal with less money from the Federal Government, and, therefore, they are going to have to look at what some of these costs of government are, what it is going to cost them for schools and roads, and what monies they are going to be taking in terms of revenues.

A lot of this kind of information—more of it is coming around in different communities around the country, but it needs to be centered in one place where this information can be spread out.

I think that ATTRA could serve a very, very useful purpose. There are considering centering at the Agricenter International in the Memphis area which is a good location, good central location, for this part of the country.

And there is a lot of interest and there is a 1,000 acre farm there that a lot of conservation practices and other kinds of technology could be tried out on.

So, I think that this idea is one that we strongly support at the American Farmland Trust. I have been to the Agricenter in Memphis. I have seen the facility. I am very, very impressed with it. I think an expenditure of a small $1.8 million is relatively small considering what this kind of center could do for not only farmers but for rural communities.

That basically summarizes my testimony. I would like to add a couple other points.

I think the ATTRA could be involved not only in transferring information; they could also be involved in doing some analyses of—for example, we have the conservation reserve now that is supposed to take out $45 million acres of hill land in the next ten years.

I am quite disappointed at the initial sign up that we have had for that, but, USDA is going out again in May for a two week signup period.

We are hoping they will do a better job, that they will get more land in this.

But that kind of a conservation reserve needs to be analyzed and evaluated soon. Congress needs to know, for example, whether we are getting the kind of hill erodable land use, that portion that the 1985 farm bill intended us to get out.

In addition to that, there is the conservation easements idea for farmers who have high indebtedness with Farmers Home Administration.

That portion was included in the 1985 farm bill by Senator Cochran and Congressman Franklin on the House side, and it gives the farmers who have had high indebtedness with Farmers Home Administration an opportunity to reduce that indebtedness through a conservation easement on either hill erodable land or on wet land on their particular farm.

Again, this is an idea that I think needs to be tried. I think it could be very helpful to farmers, and I think this is a legitimate kind of thing that ATTRA could be involved in.

I want to thank you for the opportunity to testify.

Mr. **Watkins**. Thank you.

Just a quick question.

You are saying ATTRA would work with the communities and farmers, primarily.

Are you talking about public sector, or are you talking about primarily farmer agriculture, or what are you talking about?

Mr. **Gray**. I think we are talking about farmers and rural communities. I think that the problems extend beyond just the farmer communities—also in the rural communities, local government as well as private sector.

Mr. **Watkins**. Are there some groups doing certain things along that line? I know we have had Oklahoma State University working with the public sector in Oklahoma, rural communities, county commissioners, on trying to get various technologies in public sectors.

I was kind of interested if the extension people are disseminating a lot of things. Quite interesting.

Mrs. **Smith**. I have no questions, but we certainly appreciated the testimony. It was excellent testimony.

Mr. **Gray**. Thank you very much.

Mr. **Watkins**. Thank you for your time and all.

[The statement of Robert J. Gray follows:]

TESTIMONY OF

ROBERT J. GRAY
SENIOR ASSOCIATE/POLICY DEVELOPMENT
AMERICAN FARMLAND TRUST

BEFORE THE

SUBCOMMITTEE ON APPROPRIATIONS
AGRICULTURE, RURAL DEVELOPMENT AND RELATED AGENCIES

OF THE

COMMITTEE ON APPROPRIATIONS

U. S. HOUSE OF REPRESENTATIVES

April 15, 1986

Mr. Chairman, members of the Agriculture, Rural Development and Related Agencies Subcommittee on Appropriations, I appreciate the opportunity to testify today. I am Bob Gray, Senior Associate for Policy Development, with the American Farmland Trust (AFT). We are a private nonprofit organization this is concerned with land conservation issues. We have over 35,000 members nationwide.

During the last three years at AFT I have worked extensively on an evaluation of the Federal Soil Conservation Programs. Based upon our evaluation and working with several other major conservation organizations, we made a series of recommendations to Congress for changes in the current soil conservation programs. Congress responded with a number of sweeping changes in the Conservation Title of the 1985 Farm Bill.

My purpose in testifying today is to urge your support for ATTRA, Appropriate Technology Transfer for Rural Areas, under the USDA grant authority at a level of $1.8 million for FY 1987. I have spent a great deal of my time in the last few years working with rural counties and communities towards more effective ways to manage and protect their natural resources in ways that also will save them money. AFT is also deeply concerned about encouraging the preservation of our farmland, but we recognize that this must be done in a context that proves economical to those having to change their planned approaches. To make this connection we have conducted numerous surveys and analyses of costs related to current methods of resource management to better understand if soil and water and land conservation will prove economical to rural communities and farmers.

For example, we recently completed a density-related public cost analysis for Loudoun County, Virginia. It showed that low density development (One housing unit per five acres) cost three times as much to service in terms of costs for school transportation and operation, water and sewer and road maintenance.

We are currently conducting an off-site damage analysis in a watershed in Minnesota to determine the cost of soil erosion in ditches, impoundment areas, water supplies, etc.

I only mention these types of studies to underscore the importance of transferring this kind of information to other communities who are looking for ways to cut the cost of government services and at the same time effectively manage their resources.

I feel that ATTRA could serve a very useful purpose in transferring this and other information to communities around the country. I also believe that ATTRA could be very helpful in other ways. It could, for example, conduct analyses of farms that have applied for the conservation reserve program to determine the effectiveness of this program. Since ATTRA will have the flexibility to conduct such an analysis in a rapid, routine manner, their involvement in this would be important.

In addition, I believe ATTRA could be helpful in getting a number of the other conservation programs off the ground - including the conservation easement program which gives Farmers

Home Administration the ability to reduce farmer indebtedness by placing easements on highly erodible cropland and wetlands.

In summary, by providing knowledge of the costs related to resource utilization and of the long-term management solutions available to rural communities, ATTRA, working through extension and rural communities, could have a strong impact on assisting our rural areas to lower their operating costs while improving their resource management. By making available a centralized, up-dated data base on the technologies developed by the public and private sector and of the successes in these areas, extension, farmers and communities will be able to take quick strides in applying technological changes.

I urge the Committee to fund ATTRA at $1.8 million to be managed by the National Center for Appropriate Technology located at Agricenter International. NCAT's technology transfer capabilities and the location at Agricenter will ensure that ATTRA is set up and running in a rapid, efficient manner. I hope that by this time next year I will be able to come and report on what communities have already been assisted by ATTRA and the result of that assistance. It is a very timely, very needed program.

Thank you. I would be pleased to answer any questions.

TUESDAY, APRIL 15, 1986.

RHIZOMANIA RESEARCH

WITNESSES

JAMES H. FISCHER, FORT COLLINS, COLORADO, MANAGER, BEET SUGAR DEVELOPMENT FOUNDATION

BEN GOODWIN, STOCKTON, CALIFORNIA, EXECUTIVE MANAGER, CALIFORNIA BEET GROWERS ASSOCIATION

LEO HOEHN, SCOTTSBLUFF, NEBRASKA, VICE PRESIDENT, AGRICULTURE, WESTERN SUGAR COMPANY

ROGER HILL, VICE PRESIDENT, HOLLY SUGAR CORPORATION, COLORADO SPRINGS, COLORADO

Mr. WATKINS. Now we have James Fischer. You have a couple of people with you, Mr. Goodwin and Mr. Hoehn.

Mr. FISCHER. Yes, sir.

Mr. WATKINS. As you know, our policy is to make your entire written testimony part of the record, so we encourage you to summarize your testimony at this time.

Mr. FISCHER. Thank you, Mr. Chairman and members of the committee.

On my right is Mr. Leo Hoehn, Scottsbluff, Nebraska, Vice President-Agriculture, for Western Sugar Company.

On my immediate left is Roger Hill, Vice President, Holly Sugar Corporation, Colorado Springs, Colorado.

And my far left is Ben Goodwin, Stockton, California, Executive Manager, California Beet Growers Association.

We are here to talk to you about a very, very devastating disease that we have in sugar beets that we observed in 1983 for the first time.

It is a disease that has been in Western Europe for a number of years and has been extremely devastating to the beet sugar industry over there, and in Italy earlier it has caused a demise of the Italian industry in the Poe River Valley.

We certainly are not in a position to have this occur to us, and already we have 26,000 acres affected in the State of California that we are not going to be able to raise sugar beets on in the future, because once this problem is in the soil, it is relatively impossible to get rid of it.

Research efforts that have been made so far in our domestic areas have shown that there are possibilities to cope with this disease through cultural practices and the research in the areas of converting disease resistance from commercial and wild species to sugar beets.

As the Secretary-Manager of the Beet Sugar Development Foundation, I represent all of the beet sugar companies in the United States, and obviously we can tell you the growers and producers of sugar beets have a vital interest in this.

So, we have a combined approach here. We are distributing funds to the USDA research program, and we feel that this problem is not restricted to a state region. It is not governed by State boundaries and, therefore, becomes a problem, we believe, that fits well into the Agriculture Research Services research programs.

Two years ago, we managed to get $50,000 and again this past year $50,000 in emergency funds from Dr. Terry Kennedy's office in support of initial investigations on this Rhizomania disease, and that research has provided these capabilities that I mentioned to you.

We think in order to pursue this vigorously we need approximately $400,000 made available to specifically the Salinas station of the Agricultural Research Service, because that is where the disease is and we certainly don't want to export it to any other, even though we find that the virus has already come in to some of the Texas area.

We want to stop it before it goes any further. Therefore, we are proposing to you to consider a $50,000 amount to replace the emergency funding that has come through the Agriculture Research Services for the past two years.

We believe that we need to create the possibility of two additional professional people at the Salinas station, and these approximate about $175,000 a year, to perpetuate these professional efforts.

One would approach the management of the soil born feed crops and vegetable pathogens in the soil that affect Rhizomania, and the other would be for a virologist or biochemist or genetic engineer who can look forward and ahead to introducing new germ plasma in the resistance characteristics of sugar beet.

We believe in this effort that we will be able to effect some very, very significant improvement in the possibility of coping with Rhizomania in California and preventing it from spreading to other beet growing areas, into the midwest, and to the eastern area.

It certainly is possible for it to proliferate there, and we would like to have you give favorable consideration of our request.

We believe it is of vital importance to our industry.

Mr. **Watkins**. Thank you very much for your testimony.

Mrs. Smith?

Mrs. **Smith**. Yes. I want to especially welcome these folks. I live right on the edge of the sugar beet country, and I certainly want you to stop that Rhizomania and get rid of it. We don't need any more problems in Nebraska.

So, I am very much for this research. I think it is terribly important. Of course, we are all aware that we are having to cut our budget very carefully this year, but we certainly will give this every possible consideration.

I would like to ask a couple of questions, particularly of Mr. Hoehn, and then deal with a little different subject. What about the future of the Coal plant and Goodlow plant?

My understanding is that Taylor has permission to buy some of the equipment in those plants. Of course, if any of the equipment goes out, they probably never could be reopened.

Are any of you folks fully informed about that?

Mr. **Hoehn**. Yes, I am. I believe that is correct.

Mrs. **Smith**. Are they going to buy some of the equipment out of those plants?

Mr. **Hoehn**. They have purchased some of the equipment.

Mrs. **Smith**. Does it mean they won't ever be operating again?

Mr. **Hoehn**. It seems unlikely that they will, yes.

Mr. **Fischer**. We understand they intend to increase the size of it factory operation which permits re-establishments of some of that area, as far as transportation of the raw materials to the factory for processing is concerned.

Some of this will be expanded beyond the 37, 38 acres this year.

Mr. **Hoehn**. In Colorado, we are contracting 38,000 acres; in Nebraska, 53,000.

Mrs. **Smith**. I am very much interested.

You know, I said to my good colleague I hadn't seen a sugar beet producer who hadn't asked me when they are going to get that payment from the government, until you came, and you didn't even mention it.

You are interested in not only the processor but all the growers, and everybody everywhere that is in sugar beets is deeply concerned about this, and you are all in full accord that it is extremely important. And we will carry that message to the other members.

Mr. **Fischer**. This is when we run into a problem. We have no problem getting our forces all together and we have them here together in this testimony.

Mrs. **Smith**. Great.

Mr. **Watkins**. Thank you very much for your testimony. We appreciate your coming and being with us.

[Mr. Fischer's statement follows:]

STATEMENT BY
THE BEET SUGAR DEVELOPMENT FOUNDATION
Before the
COMMITTEE ON APPROPRIATIONS
SUBCOMMITTEE ON AGRICULTURE, RURAL DEVELOPMENT AND RELATED AGENCIES

April 15, 1985

REQUEST FOR USDA-ARS RESEARCH FUNDS TO COMBAT RHIZOMANIA IN SUGARBEETS

Mr. Chairman, Members of the Committee:

Rhizomania is not the latest teenage dance craze. Nor is it a musical rock group.

Rhizomania is a devastating plant disease affecting sugarbeets but capable also of infesting numerous other crops. It first manifested itself in this country in California in 1983. At that time 33 fields involving 2600 acres of sugarbeets were discovered. In 1984, an additional 6200 acres were essentially destroyed by the virus. During 1985 an additional 17,800 acres have been shown to be infested or lost. This comprises a total of 26,600 acres and over 300 fields that no longer can be used for production of sugarbeets. During 1985 the disease was also found in Texas.

First discovered in Italy, Rhizomania has spread rapidly into many European countries. The disease is caused by the Beet Necrotic Yellow Vein Virus (BNYVV) and is transmitted to the beet by a root-invading soil-borne fungus _Polymyxa_ _betae_. It can be transmitted easily by tailing waters, agricultural equipment, dust, --even clothing worn by agricultural workers. The fungus vector, _P. betae_, has been found as far north as Alberta, Canada and as far south as the Mexican border and, although extensive searches have not yet been made, it has been uncovered in Nebraska, Colorado and Texas.

The vector and the virus have the potential of affecting sugarbeet production in any of the present 14 states where sugarbeets are grown. We are here today seeking additional funding for basic research aimed at controlling this industry-threatening plant virus.

Research on Rhizomania is in its infancy. It has been learned that fumigation of the soil with methyl-bromide can destroy the vector, but the cost is prohibitive. Since reinfestation of the treated soil layer is unavoidable, disinfection is ineffective. Negative results have been observed with fungicides.

Breeding of tolerant varieties against Rhizomania began in Europe in 1978. Some success has been observed, enough to suggest that concerted breeding efforts be made by every affected agency.

A complex of virus diseases of grain (wheat, barley, oats and rice) occur in Eastern U.S. and in other parts of the world. These diseases have similarities to Rhizomania, thus Rhizomania-like diseases may attack a large number of crops, species including grains, sugarbeets and vegetables.

In 1984, and again in 1985, the USDA-ARS provided $50,000 of emergency funds to initiate exploratory research. A similar effort has been made by the United States Beet Sugar Industry, processors and growers. Enough information has been collected to determine the direction that research efforts must take.

It is proposed that the Rhizomania research initiated at the USDA Agricultural Research Station at Salinas, California be expanded to embrace fundamental research on the disease and related diseases. An additional $400,000 is urgently required for use as follows:

$50,000 to replace the emergency funding supplied by the ARS in 1984-85;

$175,000 to reinstitute a recently terminated CRIS unit so that it may continue research in the area of Biology and Management of Soil-Borne Field Crop and Vegetable pathogens; and

$175,000 for a new professional position (Virologist-biochemist-genetic engineer) to investigate the biochemical or molecular biological mechanisms of arthropod and soil-borne viruses as related to resistance and immunity.

This request is being made by the Beet Sugar Development Foundation whose members include the U.S. beet sugar processors and domestic producers and suppliers of sugarbeet seed. The request is wholeheartedly endorsed by all U.S. grower associations.

Under a broad-form cooperative agreement between the USDA and the Foundation, supplementary research funds have been made available to USDA-ARS researchers for the past 40 years. It is our intent for the Foundation to continue at least the present level of financial involvement which presently is in excess of $300,000 annually.

Mr. Chairman and Members of the Committee, Rhizomania is a very serious threat to a basic U.S. agricultural industry which operates in 14 states. Moreover, any fallout from the disease could threaten a large number of other crops on which this country depends.

We believe that a relatively small investment for accelerated research at this time will return substantial future savings.

Thank you for this opportunity to appear.

TUESDAY, APRIL 15, 1986.

TECHNOLOGY DEVELOPMENT AND TRANSFER

WITNESS

STEPHEN J. GAGE, PRESIDENT, MIDWEST TECHNOLOGY DEVELOPMENT INSTITUTE

Mr. WATKINS. At this time we have Stephen J. Gage.

Your entire testimony will be made part of the record, and feel free to summarize your remarks. We are sure happy to have you here.

Mr. GAGE. Good. Thank you, Mr. Chairman.

My name is Stephen J. Gage. I am President of the Midwest Technology Development Institute (MTDI) which is located in St. Paul, Minnesota.

MTDI is a nonprofit corporation which was founded by the governors of nine midwestern states—Kansas, Indiana, Illinois, Michigan, Minnesota, Nebraska, North Dakota, Ohio, and Wisconsin—to foster cooperative research and development and more efficient and equitable transfer of technology.

MTDI is now in the process of establishing three technology development consortia, including one which will address some of the critical problems facing midwestern agriculture.

That consortium—called the Farm Enterprise Partnership—will operate on the premise that many small- and medium-sized farms can become profitable, viable businesses with the help of the Partnership.

The Partnership, which will include individual family farmers, agricultural scientists, technologies, and extension agents, and rural industries, will concentrate initially on:

One, developing new connections between the farmers' management decisions and market opportunities for more diverse crops.

Two, organizing and conducting cooperative R&D on needed farm technologies.

Three, helping the farmers adapt low input, appropriate scale farming technologies, alternative crops, and management practices that reduce costs and increase profits.

Four, transferring these technologies broadly across the region.

Five, bringing the family farmer into the agricultural R&D and technology transfer cycle.

Included in the 1985 Farm Bill were two sections which, if implemented, would be extremely beneficial to the Farm Enterprise Partnership and, in turn, to farmers in the Midwest and throughout the country.

The sections to which I refer are the Agricultural Productivity Act and the Appropriate Technology Transfer for Rural Areas (ATTRA) program.

The Agricultural Productivity Act provides for research and development on agricultural production systems which also maintain the productivity of the land, reduce soil erosion, and conserve energy and natural resources.

Because the results and experiences from these demonstration farms could provide a rich source of information for the Farm Enterprise Partnership, the Midwest Technology Development Institute strongly supports the inclusion of $2 million in funding in the U.S. Department of Agriculture's Fiscal Year 1987 budget.

The Partnership would be pleased to work closely with the USDA to identify promising candidates for the demonstration farms which would be located in the midwestern states.

Further, the scientists involved in the Partnership's research would work with USDA scientists to ensure that the research methodology is sound and widely acceptable.

Equally important, these scientists will work closely with the selected demonstration farms to ensure that the results receive wide dissemination throughout the region.

The second program—Appropriate Technology Transfer for Rural Areas—provides for the development and dissemination of a data base of appropriate technologies for rural resource management.

I would like to associate my remarks with those of Mr. Gray who appeared here a few minutes ago, and also endorse the ATTRA program.

Since this data base will include results from all government and private research efforts on lowering costs of farm inputs and of rural community operations, it would be very beneficial for the Farm Enterprise Partnership and the Midwest.

We envision that the results from the Partnership's midwestern efforts could be shared with ATTRA in return for easier access to existing midwestern successes and relevant results from other regions of the country.

In the Midwest, farms and communities need help in relieving their extremely tight cash flow situations in any way possible.

Numerous examples of lowered farm input costs—through cutting fertilizer and pesticide use, cutting water use, and reducing energy needs—exist throughout the country.

Midwestern land grant universities and extension services have been making progress in both research on and transfer of improved techniques to lower input costs.

Many midwestern communities are looking for ways to cut costs and some are succeeding with a variety of approaches. But we are just beginning.

Every business in the United States today is faced with having to cut costs in order to survive, and our farmers and rural communities are no different.

Since ATTRA offers considerable potential for capturing and sharing information on appropriate technologies for agriculture and rural communities, MTDI supports an appropriation of $1.5 million in USDA's Fiscal Year 1987 budget to fund ATTRA's important effort.

I think these are 20 important programs, Mr. Chairman, that together with State and regional programs could really help small and medium size farmers in rural communities survive the next few years and regain financial viability.

I appreciate this opportunity to appear before the committee and express our support for these programs.

Mr. WATKINS. Thank you very much, Steve. I am delighted to know where you are now located. I have missed your guidance and counseling in some of the areas of EPA.

I hope all is going well with you, and you seemed to be enthusiastic about your program and your activities there.

I appreciate the testimony.

Mrs. Smith.

Mrs. SMITH. Thank you for coming, Steve. You gave us some excellent testimony and some excellent information, and we appreciate it very much.

Mr. GAGE. Thank you for the opportunity.

[The statement of Stephen J. Gage follows:]

TESTIMONY BEFORE
AGRICULTURAL APPROPRIATIONS SUBCOMMITTEE
U.S. HOUSE OF REPRESENTATIVES

April 15, 1986

Mr. Chairman --

My name is Stephen J. Gage. I am President of the Midwest Technology Development Institute (MTDI) which is located in St. Paul, Minnesota. MTDI is a nonprofit corporation which was founded by the governors of nine midwestern states -- Kansas, Indiana, Illinois, Michigan, Minnesota, Nebraska, North Dakota, Ohio, and Wisconsin -- to foster cooperative research and development and more efficient and equitable transfer of technology. I would like to submit for the record a brochure which describes MTDI in detail and limit my remarks here today. On behalf of MTDI, I would like to request that the Subcommittee include, in the USDA's FY1987 budget, $2 million for the Agricultural Productivity Act and $1.5 million for the Appropriate Technology Transfer for Rural Areas program.

One of the goals of MTDI is to enhance cooperation in technology development among midwestern and foreign universities and industries through the establishment of technology development consortia. These consortia will focus on a carefully selected industry sector which can significantly benefit from the efforts of pooled resources and can capitalize on the strategic opportunities present in the Midwest.

MTDI is now in the process of establishing three technology development consortia, including one which will address some of the critical problems facing midwestern agriculture. That consortium -- called the Farm Enterprise Partnership -- will operate on the premise that many small- and medium-sized farms can become profitable, viable businesses with the help of the Partnership.

The Partnership, which will include individual family farmers, agricultural scientists, technologists, and extension agents, and rural industries, will concentrate initially on:

> Developing new connections between the farmers' management decisions and market opportunities for more diverse crops;
>
> Organizing and conducting cooperative R&D on needed farm technologies;
>
> Helping the farmers adapt low input, appropriate scale farming technologies, alternative crops, and management practices that reduce costs and increase profits;

Transferring these technologies broadly across the region;

Bringing the family farmer into the agricultural R&D and technology transfer cycle.

Included in the 1985 Farm Bill were two sections which, if implemented, would be extremely beneficial to the Farm Enterprise Partnership and, in turn, to farmers in the Midwest and throughout the country. The sections to which I refer are the Agricultural Productivity Act and the Appropriate Technology Transfer for Rural Areas (ATTRA) program.

The Agricultural Productivity Act provides for research and development on agricultural production systems which also maintain the productivity of the land, reduce soil erosion, and conserve energy and natural resources. The Act specifically provides for farm demonstration projects which are broadly representative of U.S. agriculture.

Because the results and experiences from these demonstration farms could provide a rich source of information for the Farm Enterprise Partnership, the Midwest Technology Development Institute strongly supports the inclusion of $2 million in funding in the U.S. Department of Agriculture's FY1987 budget.

MTDI is aware that, during earlier hearings on the Agricultural Productivity Act, there were criticisms of the Act's "tilt toward organic farming" and the research methodology specified or implied in the Act. MTDI believes that, through the recent involvement of credible land grant university scientists in onfarm experiment planning and design, many of these concerns have been resolved. With an open dialogue between USDA officials and alternative agriculture practitioners, the remaining concerns can be dealt with.

The Farm Enterprise Partnership, in building a bridge between the traditional agricultural scientific community and the alternative agriculture advocates, will involve scientists of both persuasions in planning and monitoring the onfarm research which the Partnership supports. This cooperation should go a long ways towards resolving the differences between the two camps and lead to approaches which combine the best results of both traditional and alternative agriculture for the individual farmer.

The Partnership would be pleased to work closely with the USDA to identify promising candidates for the demonstration farms which would be located in the midwestern states. Further the scientists involved in the Partnership's research would work with USDA scientists to ensure that the research methodology is sound and widely acceptable. Equally important, these scientists will work closely with the selected demonstration farms to ensure that the results receive wide dissemination throughout the region.

The second program -- Appropriate Technology Transfer for Rural Areas -- provides for the development and dissemination of a data base of appropriate technologies for rural resource management. Since this data base will include results from all government and private research efforts on lowering costs of farm inputs and of rural community operations, it would be very beneficial for the Farm Enterprise Partnership and the Midwest. We envision that the results from the Partnership's midwestern efforts could be shared with ATTRA in return for easier access to existing midwestern successes and relevant results from other regions of the country.

In the Midwest, farms and communities need help in relieving their extremely tight cash flow situations in any way possible. Numerous examples of lowered farm input costs -- through cutting fertilizer and pesticide use, cutting water use, and reducing energy needs -- exist throughout the country. Midwestern land grant universities and extension services have been making progress in both research on and transfer of improved techniques to lower input costs. Many midwestern communities are looking for ways to cut costs and some are succeeding with a variety of approaches. But we are just beginning.

There is a strong need to have a centrally coordinated, peer-reviewed data base including all technologies -- Federal, state, public, and private -- which have been developed in low input farming, crop marketing and processing diversification, and community resource management. ATTRA can fill this need quickly and effectively. Trained specialists adept at interpreting this data base and knowledgeable in these technologies can expedite the transfer of these technologies. ATTRA also addresses this challenge.

Since ATTRA offers considerable potential for capturing and sharing information on appropriate technologies for agriculture and rural communities, MTDI supports an appropriation of $1.5 million in USDA's FY1987 budget to fund ATTRA's important effort.

The Agricultural Productivity Act and ATTRA are two important new Federal programs that, together with state and regional efforts like MTDI, can help small- and medium-sized farmers and rural communities across the country regain financial viability. Funding of these programs will also ensure that USDA can gain maximum leverage of the Federal funds by encouraging state governments and private sources to share in the cost of such R&D and information dissemination.

Thank you, Mr. Chairman, for the opportunity to appear before this Subcommittee to express our support for these two programs.

TUESDAY, APRIL 15, 1986.

HOME SEWING PROGRAM

WITNESSES

MORRIS JARVIS, DIRECTOR, AMERICAN HOME SEWING ASSOCIATION

JOHN CHWAT, WASHINGTON REPRESENTATIVE, AMERICAN HOME SEWING ASSOCIATION

Mr. WATKINS. Morris Jarvis, American Home Sewing Association. As you know, the policy is that we will make the entire testimony part of the record. You can feel free to briefly summarize your statement.

Mr. JARVIS. Thank you, Mr. Chairman.

Mr. Chairman and members of the subcommittee, I am Morris Jarvis, President of the Hancock Textile Company located in Tupelo, Mississippi, and a member of the Board of Directors of the American Home Sewing Association.

I am appearing before you today on behalf of the 600 corporate and retail members of the Association.

I am accompanied today by John Chwat, Washington Representative for the American Home Sewing Association.

Our association is the only organization which represents the entire home sewing industry in the United States, including such areas as fabrics, fibers, patterns, notions, trimmings, sewing machine manufacturing, retailing, wholesaling and publishing.

Today the sewing industry generates over $3.5 billion in sales annually through 20,000 retail stores serving over 40 million home sewing consumers.

In addition, over 40,000 educators, junior and senior high school teachers, college professors, extension home economists and retail educators are actively engaged in sewing skill development.

Mr. Chairman, the Administration has proposed a $202.7 million reduction from last year in the Fiscal Year 1987 U.S. Department of Agriculture Extension Service budget.

These reductions would virtually assure the elimination of all Extension Service clothing and textile specialists and sewing education programs serving hundreds of thousands of citizens throughout the nation.

These Extension Service education programs are critical to the sewing and textile industries. We therefore recommend that this subcommittee restore the proposed Extension Service cuts and appropriate $342.7 million, the same as last year's funding level, for all Extension Service programs.

To illustrate the importance of the Extension Service clothing and textile programs, let me use the example of my home State of Mississippi, which I am sure the Chairman will also appreciate.

Under the leadership of Dr. James Carpenter who is the Director of the Mississippi Cooperative Extension Service, and Beth Duncan, who is an Extension Clothing Specialist at the Mississippi State University, 92,000 adults participated in 1985 in Mississippi clothing and textile programs and 6,136 young people conducted 4-H clothing projects in 1985.

Eighty-one counties in the State conducted a total of 1,500 clothing programs in 1985 with families, working women, homemaker clubs, organizations, teachers, retailers and young families regarding clothing construction, clothing selection and textile care.

This record of Extension Service involvement in clothing and textiles is not confined to Mississippi. Several examples deserve special mention.

For the previous three years, the Cooperative Extensive Service at the University of Massachusetts has sponsored an annual "Sewing as a Business" conference for hundreds of attendees from around the State.

The Virginia Cooperative Extension Service developed a "Sew Master Program" to train and certify volunteers who quality to teach sewing education programs.

In many areas of that state, the Extension Service is the only source for clothing-construction educational information.

We also have a concern relating to the Department of Agriculture's commitment to clothing and textile programs.

We believe that the Department of Agriculture has ignored this subcommittee's directive of last year, found on page 38 in House Report 99-11 regarding H.R. 3037 (which appropriated funds for Fiscal Year 1986), in which the subcommittee recommended that: "The committee also calls on the Extension Service to give expanded attention to home sewing as part of the extension program."

Despite attempts by the industry to enhance clothing and textile Extension Service programs, and to propose joint industry-USDA sewing education programs, the Extension Service has not been responsive.

In fact, on September 22, 1985, merely two months after this subcommittee issued the Report language which I just referred to, the Extension Service has not been responsive.

In fact, on September 22, 1985, merely two months after this subcommittee issued the Report language which I just referred to, the Extension Committee on Organizational Policy (ECOP) adopted the following statement:

"While it is recognized that clothing construction is one alternative for extending resources of families, the area of diet, nutrition, and health is the number one priority for extension home economics programs. This priority is consistent with both the Joint Council and Users Advisory Board. Current limited resources do not allow time for professional staff to teach clothing construction to large numbers of people."

While sewing education is a popular course for adults and young people, in the industry has found that there is a growing trend that sewing is not being taught regularly in our schools, and is being ignored by various State levels as well as in the USDA. Soon a whole generation may be without this important skill.

In summary, the American Home Sewing Association recommends the following specific points to the subcommittee.

One, an appropriation for Fiscal Year 1987 should be made to the extension service for $342.7 million (the same level of funding as last year.

And, two, language should be included in the Subcommittee Report which directs the USDA place more emphasis on clothing and textile programs during the next Fiscal Year.

Thank you.

Mr. **Watkins**. Thank you.

I know Chairman Whitten regrets not being here and being able to receive testimony from someone from Tupelo, Mississippi.

Mrs. **Smith**. I want to welcome you and tell you that I have a lot of interest in home sewing. You know, I was 18 years old and had finished my third year in college before I ever had a ready-made dress.

My clothes, everything I wore was made by my mother, and you got along fine doing it that way. But we appreciate you being here and your testifying about a very important subject.

Mr. **Jarvis**. Thank you.

Mr. **Watkins**. The only thing I regret is when we finally went to paper feed sacks. As long as we had the printed feed sacks, in my area of Oklahoma, my sister had a dress and my brother and I had a shirt. We went to school dressed in the same thing.

Mr. **Jarvis**. I wore several of those myself.

Mr. **Watkins**. Thank you for coming and testifying.

[The statement of Morris Jarvis follows:]

STATEMENT OF

MORRIS JARVIS, DIRECTOR
AMERICAN HOME SEWING ASSOCIATION

BEFORE THE

HOUSE APPROPRIATIONS SUBCOMMITTEE ON
AGRICULTURE, RURAL DEVELOPMENT AND RELATED AGENCIES

ON

APRIL 15, 1986

Mr. Chairman and members of the Subcommittee, I am Morris Jarvis, President of the Hancock Textile Company located in Tupelo, Mississippi, and a member of the Board of Directors of the American Home Sewing Association. I am appearing before you today on behalf of the 600 corporate and retail members of the Association.

Our Association is the only organization which represents the entire home sewing industry in the United States, including such areas as fabrics, fibers, patterns, notions, trimmings, sewing machine manufacturing, retailing, wholesaling and publishing. Today the sewing industry generates over $3.5 billion in sales annually through 20,000 retail stores serving over 40 million home sewing consumers. In addition, over 40,000 educators, junior and senior high school teachers, college professors, extension home economists and retail educators are actively engaged in sewing skill development.

All of these businesses and all of these people -- manufacturers, wholesalers, retailers, educators and consumers --

are the beneficiaries of educational programs that have taught sewing skills to millions of Americans and which, in turn, have created job opportunities for them and have enhanced the quality of their family life.

Mr. Chairman, the Administration has proposed a $202.7 million reduction from last year in the FY 1987 U.S. Department of Agriculture's Extension Service budget. These reductions would virtually assure the elimination of all Extension Service clothing an textile specialists and sewing education programs serving hundreds of thousands of citizens throughout the Nation. These Extension Service education programs are critical to the sewing and textile industries. We therefore recommend that this Subcommittee restore the proposed Extension Service cuts and appropriate $342.7 million, the same as last year's funding level, for all Extension Service programs.

While clothing and textiles represent a modest portion of the existing Extension Service education programs, clothing is a basic necessity of life, and therefore, sewing and clothing-related programs take on an economic importance to our society that far exceeds that of other desirable but less fundamental programs. Sewing skills enable people to lower their expenses for clothing and to obtain income through utilization of their sewing skills by performing part- or full-time sewing related work. People do not need extensive facilities or equipment to make clothes.

Since sewing is a learned skill, people need to be taught the basic skills necessary to transfer design concepts and fabric into useful products either for their own use or for sale to others. Given the problem of high unemployment in some areas, the importance of providing programs that will serve the special clothing needs of targeted population groups is critical.

To illustrate the importance of the Extension Service clothing and textile programs, let me use the example of my home State of Mississippi, which I am sure the Chairman will also appreciate. Under the leadership of Dr. James Carpenter who is the Director of the Mississippi Cooperative Extension Service, and Beth Duncan, who is an Extension Clothing Specialist at the Mississippi State University, 92,000 adults participated in 1985 in Mississippi clothing and textile programs and 6,136 young people conducted 4-H clothing projects in 1985. Eighty-one counties in the State conducted a total of 1,500 clothing programs in 1985 with families, working women, homemaker clubs, organizations, teachers, retailers and young families regarding clothing construction, clothing selection and textile care.

This record of Extension Service involvement in clothing and textiles is not confined to Mississippi. Several examples deserve special mention. For the previous three years, the Cooperative Extension Service at the University of Massachusetts has sponsored an annual "Sewing as a Business" conference for hundreds of attendees from around the State. The Virginia Cooperative Extension Service developed a "Sew Master Program" to train and certify volunteers who qualify to teach sewing education programs. In many areas of that state, the Extension Service is the only source for clothing-construction educational information.

At present, the home-sewing industry cooperates with the Extension Service through corporate sponsorship of specific programs in the 4-H area. For example, in 1983 over 408,000 4-H students enrolled in clothing courses and over 175,000 participated in a Fashion Revue program. Both of these programs are economically suppported by our industry.

The American Home Sewing Association recommends full funding for the Extension Service this year. We also have a concern relating to the Department of Agriculture's commitment to clothing and textile programs. We beleive that the Department of Agriculture has ignored this Subcommittee's Directive of last year, found on page 38 in House Report 99-11 regarding H.R 3037 (which appropriated funds for FY 1986), in which the Subcommittee recommended that:

> "The Committee also calls on the Extension Service to give expanded attention to home sewing as part of the extension program."

Despite attempts by the industry to enhance clothing and textile Extension Service programs, and to propose joint industry-USDA sewing education programs, the Extension Service has not been responsive. In fact, on September 22, 1985, merely two months after this Subcommittee issued the Report language which I just referred to, the Extension Committee on Organizational Policy (ECOP) adopted the following statement:

> "While it is recognized that clothing construction is one alternative for extending resources of families, the area of diet, nutrition, and health is the number one priority for extension home economics programs. This priority is consistent with both the Joint Council and Users Advisory Board. Current limited resources do not allow time for professional staff to teach clothing construction to large numbers of people.

While sewing education is a popular course for adults and young people, in the industry has found that there is a growing trend that sewing is not being taught regularly in our schools, and is being ignored by various State levels as well as in the USDA. Soon a whole generation may be without this important skill.

In summary, the American Home Sewing Association recommends the following specific points to the Subcommittee:

1. An appropriation for FY 1987 should be made to the extension service for $342.7 million (the same level of funding as last year); and
2. Language should be included in the Subcommittee Report which directs the USDA place more emphasis on clothing and textile programs during the next Fiscal Year.

TUESDAY, APRIL 15, 1986.

EXTENSION HOME ECONOMICS

WITNESSES

KAREN CRAIG, CHAIRMAN, PROFESSIONAL SECTION UNIT, AMERICAN HOME ECONOMICS ASSOCIATION

JOAN R. MCFADDEN, EXECUTIVE DIRECTOR, AMERICAN HOME ECONOMICS ASSOCIATION

Mr. WATKINS. Dr. Karen Craig, American Home Economics Association.

Dr. Craig, welcome, and would you like to also introduce your guest. As you know, we will make your entire testimony part of the record, so feel free to highlight and summarize it.

Dr. CRAIG. I have with me Dr. Joan McFadden who is Executive Director of American Home Economics Association. We have worked on these written comments together.

Mr. Chairman and distinguished members of the subcommittee, thank you for your interest in and efforts on behalf of funding for the Cooperative Extension Service of the U.S. Department of Agriculture.

I represent the American Home Economics Association, a professional organization of 25,000 men and women with professional and technical expertise to integrate knowledge from the basic disciplines to help families solve the complex everyday problems of family life.

Efforts in home economics are primarily through prevention, development and education.

In addition, I have been employed by the Cooperative Extension Service in two states for the past eight years.

With this testimony, I would like to clarify any misunderstandings about Extension Home Economics priorities by sharing with you information about current programs that focus on the role of the family in financial management, nutrition, health, personal and emotional well-being.

Families are the thread that holds the human race and ultimately, the society, together. "The well being of American families is essential to national strength since the values that underlie national stability are forged by families."

The competencies developed through educational experiences in families provide society with individuals who are and will be responsible for maintaining the society. "Strengthening American families by teaching them to apply research-based knowledge has been a major mission of the Cooperative Extension Service since 1914."

This is consistent with the President's current concerns for families "taking care of their own" and "creating ladders of opportunity" as they remain the "core of our society".

From the early years of dealing with rural poverty to the threshhold of the 21st Century, Extension Home Economics has evolved programs which address the pressure points in the American family—food, diet and health, resource management and personal consumption patterns, and the development of people and relationships.

While the educational programs provided in 1985 to address family life issues are quite different from those of 1915, they have made it possible for families to assume responsibility for solution of contemporary problems.

In terms of the eighties, they have made it possible for many families to assume responsibility for their own "safety net".

In the early part of this century, the problem in education for adults focused on "no information". Today the problem is sorting good information from bad, developing the "thinking skills" that make it possible to apply objective criteria to determine quality of information.

Individuals and families must have good information and be able to interpret it to effectively use their food dollar, assure the best possible health for later years and use effectively the quality food supply available through U.S. Agriculture.

For example, diet, as it relates to nutrition and health, is a critical concern for people at the same time diet and health products have become a multi-million dollar industry of questionable benefit. Interpreting the Dietary Guidelines is one example.

The benefits of the shared funding of extension programs are readily apparent. That every Federal dollar is matched by two dollars of State and local money is a good investment. As a personal investor I would welcome a two for one return on my dollar.

The Expanded Food Nutrition Education program provides another example of a program that changes the lives of the people who participate.

Nutrition education to low income families, provided by paraprofessionals (many of whom have been in similar low income positions) has changed family lifestyles at the same time it has changed food consumption.

EFNEP has experienced numerous congressionally mandated evaluations, the challenges of program reduction (or elimination) and program redirection.

Nonetheless, it remains a viable program and has a proven record of success. Participating adults in families get GED's, college degrees and jobs. These people are now taxpayers and no longer depend on the welfare system.

Finally, it is significant to reiterate the importance of the Land Grant connection as it facilitates cooperation among the states.

Although cooperation may occur without formal networks, a formal nationwide network improves the efficiency with which resources are shared.

For instance, in the North Central Region, a disseminate component called for the Extension Family Life Specialists in Iowa, Michigan, Minnesota, Missouri and Nebraska to develop educational materials using the research base from a regional family stress project.

Those materials have been duplicated and are being used throughout the North Central states and in other states throughout the nation.

There are countless other payoffs from Extension Home Economics in terms of developing educational networks which are not as easily measured or described, but if you talk to your constituents they can tell you Extension Home Economics make a difference.

Extension Home Economists are providing programs to people where they are—geographic location, mind set, mental ability, and economic status—among others. They connect local needs with national priorities.

The President's concerns for strong self-sufficient families are legitimate. That cannot happen in a vacuum. Should the Federal Extension funds be eliminated for Home Economics, the human capital contributions through families will decrease.

If people do not continue to develop skills to assure self-sufficiency in economic, health, and personal well-being, our society will experience greater costs as more families rely on others to provide their "safety nets" at Federal, state and local levels.

Recommendations: one, removal of the restriction for use of funds "for agriculture production only" to allow the funds to be used to meet the needs of the people in the states, whether they need educational programming in agriculture, home economics or 4-H; two, funding for Smith-Lever at five percent above the Fiscal Year 1985 level; three, full restoration of the EFNEP funds.

Summary. On behalf of the American Home Economics Association, we thank you for the opportunity to discuss the importance of Extension Home Economics programs and the critical nature of the Federal support for these programs.

We appreciate your support in the past and urge you to consider these recommendations. We will be happy to respond to questions.

Mr. **Watkins**. Thank you very much for a concise statement with a lot of impact to it.

I agree with you on your comments. I want to assure you I concur with your views on using the fund just for agricultural production purposes only.

I know there is a great need to return a profit to agriculture but we also have a lot of other problems and concerns out in rural America.

Agriculture is the most dominating force in rural America, but there are a lot of other areas that we have got to try to assist.

Dr. **Craig**. I think one of the most exciting things happening right now is the cooperation that is going on, particularly between agriculture and home economics, with the youth dimension in those, cooperating on agriculture profitability packages which has family financial packages, emotional well-being and the agriculture profitability packages all in one.

That is happening in many states across the nation. Minnesota has a very active, well-defined program going right now.

The other area that we are working on, I think, is very exciting. The whole relationship of diet and health as it relates to the use of agricultural products, making the farmer more aware of, for example, pesticide residue and what the consumers concerns are.

And whether we like it or not, a lot of misinformation gets out in terms of residue, and there is a lot of alarm, and people are not eating the agricultural products.

And so we have to help the American consumer understand what is really going on and use good information to make good food choices.

Those are cooperative programs that are at least in the north central. We pushed hard there at our last meeting in January the agricultural programmer to put together regional concepts to deal with that whole idea.

Mr. **Watkins**. I am trying to do what I can to bring home economics into the main flow of things, because I do think they have a lot to offer in Oklahoma in that area.

Mrs. **Smith**. Thank you for being here, Dr. Craig. That was a very significant statement.

And let me tell you, you are among friends here. Some of our Committee members couldn't be here. I am sorry they couldn't, but everybody on our Committee is very much in favor of the home economics program, and our Chairman reflects what we all think: we want to bring home economics into the mainstream of the whole Extension program.

Dr. **Craig**. We appreciate that very much.

Mr. **Watkins**. I think home economics has a real role to play in the acceptability of a lot of our products, nutrition and various things of that nature.

I think we made a mistake by not having home economics play a stronger role.

Mrs. **Smith**. The homemakers' part of this has been an important part of my life since I was a little girl, starting with 4-H and working in Extension clubs all my life.

It has done so much in so many ways, particularly for farm youth and farm women.

Dr. **Craig**. We thank you. We think it is exciting times for us.

Mr. **Watkins**. Thank you very much.

[Dr. Craig's statement follows:]

Testimony of the American Home Economics Association
on Cooperative Extension Service Funding Hearings
before the
Agriculture Subcommittee on Appropriations
U.S. House of Representatives
April 15, 1986

Presented by:

Dr. Karen Craig, Chairman
Professional Section Unit
American Home Economics Association
Washington, D. C.

Mr. Chairman and distinguished members of the Subcommittee, thank you, for your interest in, and efforts on behalf of funding for the Cooperative Extension Service of the U.S. Department of Agriculture. I represent the American Home Economics Association, a professional organization of 25,000 men and women with professional and technical expertise to integrate knowledge from the basic disciplines to help families solve the complex everyday problems of family life. Efforts in home economics are primarily through prevention, development and education. In addition, I have been employed by the Cooperative Extension Service in two states for the past eight years.

The budget proposal presented to the Congress in February of 1986 recommended a reduction in funds for the Cooperative Extension Services. The budget also recommended that remaining federal funds be channeled away from Home Economics and Youth efforts.

With this testimony I would like to clarify any misunderstandings about Extension Home Economics priorities by sharing with you information about current programs that focus on the role of the family in financial management, nutrition, health, personal and emotional well-being.

Families are the thread that holds the human race and ultimately, the society together. "The well being of American families is essential to national strength since the values that underlie national stability are forged by families. Pressure brought to bear on families as a result of social and economic changes has made them an object of much concern."(1) Through its Home Economics programs, Cooperative Extension strengthens families by providing them research-based knowledge that can be applied to development of skills requisite to economic stability, physical well being and personal and emotional well-being.

The competencies developed through educational experiences in families provide society with individuals who are and will be responsible for maintaining the society. "Strengthening American families by teaching them to apply research-based knowledge has been a major mission of the Cooperative Extension Service since 1914."(2) This is consistent with the President's current concerns for families "taking care of their own" and "creating ladders of opportunity" as they remain the "core of our society" as mentioned in his State of the Union message in February 1986.

Extension Home Economics programs, through the Land Grant system, have made available to families adult education programs which are preventative and encourage problem solving in terms of the economic, physical, and emotional well being of the people of this nation. The practical problems that individuals and families face are recurring. Some are faced several times a day, some several times a week and many occur on a monthly basis. Economic instability, changing values and changing expectations make it imperative that families have problem solving skills, thinking skills, to handle effectively the recurring problems.

Formal educational offerings through the public school system have made attempts to address the same issues, but have not generally been able to meet this critical need for updating the problem-solving skills of adults in the society.

From the early years of dealing with rural poverty to the threshhold of the 21st Century, Extension Home Economics has evolved programs which address the pressure points in the American family--food, diet and health, resource management and personal consumption patterns, and the development of people and relationships.

For example, nearly all states are responding to the farm family financial stress issue with a focus toward both the agriculture production and family life issues. The network of resources available from and facilitated by federal monies has provided research, educational materials and techniques which have been adapted and implemented by many states. The multiplier effect of payoff for the taxpayer's investment in human and financial resources used to develop materials in one state transferred to another is often 5 to 10 times the initial resource output. Materials developed in Iowa, Nebraska, Michigan and Minnesota have been adapted for use in Indiana and other states where large portions of the farm population are experiencing severe stress due to farm financial issues.

Thus, while the educational programs provided in 1985 to address family life issues are quite different from those of 1915, they have made it possible for families to assume responsibility for solution of contemporary problems. In terms of the eighties, they have made it possible for many families to assume responsibility for their own 'safety net.'

Critical Nature of Home Economics Extension Today

In the early part of this century, the problem in education for adults focused on 'no information.' Today the problem is sorting good information from bad, developing the 'thinking skills' that make it possible to apply objective criteria to determine quality of information.

When the Land Grant Colleges were established with the Morrill Act in 1862, they "brought a practical approach to education that linked the classroom and the campus to national expansion (5)." The challenge today is to help families cope with communication technology, the information explosion, and the world economy/society.

The information glut society in which we have a lot of cheap information provided by self-proclaimed experts, with much of it harmful to people--physically, economically, or in terms of human development--makes it imperative that Home Economics Extension provide research-based, objective information to people, at the same time they further develop skills for evaluating the validity and usefulness of the information for coping with the problem at hand.

International trade practices have created a world economy that influences income patterns as well as the options families have for buying consumer goods. Families need to have these interpreted and develop thinking and other skills which make it possible for them to be contributing members of the society. The base for family economic stability is a constant income source. When national policies change this economic stability for families, it is essential that family members develop new skills so they may re-establish a stable economic base. Michigan is providing educational programs that help farm families develop these very skills.

Individuals and families must have good information and be able to interpret it to effectively use their food dollar, assure the best possible health for later years and use effectively the quality food supply available through U.S. Agriculture. For example, diet, as it relates to nutrition and health, is a critical concern for people at the same time diet and health products have become a multi-million dollar industry of questionable benefit. Interpreting the Dietary Guidelines in one example.

Payback to the Society on Taxpayer Investment

The benefits of the shared funding of extension programs are readily apparent. That every Federal dollar is matched by two dollars of state and local money is a good investment. As a personal investor I would welcome a two for one return on my dollar.

In addition, we can add to Extension's productivity the value of volunteer time. A recent program impact analysis conducted by the University of Wisconsin indicates that volunteers contribute 51 hours of time to Extension work for every hour of agent time (3). Extension funds—federal, state, and local—are used to teach volunteers how to teach others, to develop problem solving skills for participation in community development or management and other support activities for educational programs. Without funding and the availability of leadership development programs provided by Extension Home Economics, volunteers are not likely to be available for the many roles they fill in communities throughout this nation.

More than 60 percent of volunteers report they have increased greatly their skills for peer teaching.(4) Many volunteers use the teaching skills to teach other groups. As an example of this in Indiana, a budgeting program, "Saving Dollars When you Don't have a Dime," was taught 120 times to 3,800 volunteers by Extension Home Economists. The volunteers then taught the same lesson to 6,200 citizens throughout the state. An evaluation of the program found that 70 percent of the participants found ways to save money. The average saving was $283 per household. That translates to $1.9 million of flexibility in spending for the 70% of 7,000 households. This is a good return on an investment of approximately $3000, of which approximately $1000 was federal money.

The Expanded Food Nutrition Education program provides another example of a program that changes the lives of the people who participate. Nutrition education to low income families, provided by paraprofessionals (many of whom have been in similar low income positions) has changed family lifestyles at the same time it has changed food consumption. EFNEP has experienced numerous congressionally mandated evaluations, the challenges of program reduction (or elimination) and program re-direction. Nonetheless, it remains a viable program and has a proven record of success. Participating adults in families get GED's, college degrees and jobs. These people are now taxpayers and no longer depend on the welfare system. Paraprofessionals and EFNEP homemakers alike are on the "ladder of opportunity to employment" that the President described in his State of the Union address in February.

Finally, it is significant to reiterate the importance of the Land Grant connection as it facilitates cooperation among the states. This too, is a payoff. Although cooperation may occur without formal networks, a formal nationwide network improves the efficiency with which resources are shared. For instance, in the North Central Region, a disseminate component called for the Extension Family Life Specialists in Iowa, Michigan, Minnesota, Missouri and Nebraska to develop educational materials using the research base from a regional family stress project. Those materials have been duplicated and are being used throughout the North Central states and in other states throughout the nation.

There are countless other payoffs from Extension Home Economics in terms of developing educational networks which are not as easily measured or described, but if you talk to your constituents they can tell you Extension Home Economics make a difference.

Getting the Educational Program to the People

Extension Home Economists are providing programs to people where they are—geographic location, mind set, mental ability, and economic status—among others. They connect local needs with national priorities.

The creativity in program delivery includes the sophisticated interactive video-disc, video tapes, and problem-solving computer programs on nutrition, home insulation needs in energy education, and financial management, as well as more traditional approaches.

Newsletters are particularly effective in reaching new parents and parents of preschool children.

Self-study or correspondence programs have been effective in reaching farm families relative to stress management. In Iowa, more than 1800 families have participated in home study courses on farm family stress. As a result, they say they communicate more effectively, they are participating in more family activities, and are using exercise to help manage their stress.

Extension Home Economists have taught people how to start and maintain 'support groups.'

Conclusion

The President's concerns for strong, self-sufficient families are legitimate. That cannot happen in a vacuum. Should the Federal Extension funds be eliminated for Home Economics, the human capital contributions through families will decrease. If people do not continue to develop skills to assure self-sufficiency in economic, health, and personal well-being, our society will experience greater costs as more families rely on others to provide their "safety nets" at Federal, state, and local levels.

Recommendations

These recommendations support a rejection of the President's budget proposal. Specifically, I refer to Smith-Lever funds under Section 14 of the 1985 Farm Bill and recommend the following:

1. Removal of the restriction for use of funds "for agriculture production only" to allow the funds be used to meet the needs of the people in the states, whether they need educational programming in agriculture, home economics or 4-H.
2. Funding for Smith-Lever at 5% above the FY '85 level.
3. Full restoration of the EFNEP funds.

Summary

On behalf of the American Home Economics Association, we thank you for the opportunity to discuss the importance of Extension Home Economics programs and the critical nature of the Federal support for these programs. We appreciate your support in the past and urge you to consider these recommendations. We will be happy to respond to questions.

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TUESDAY, APRIL 15, 1986.

RURAL HOUSING PROGRAMS

WITNESS

DAVID C. SMITH, PRESIDENT, NATIONAL ASSOCIATION OF HOME BUILDERS

Mr. WATKINS. David Smith, National Association of Home Builders.

We will make your entire statement part of the record. We encourage you to summarize and highlight your statement.

Mr. SMITH. Fine.

We appreciate the opportunity to be with you this morning.

My name is David C. Smith, and I am a homebuilder and President of the National Association of Home Builders (NAHB). It is a privilege to appear before you, Mr. Watkins and Mrs. Smith, and to acknowledge your leadership in providing an effective housing delivery system to rural people.

I would also like to thank you for working with the chairman in offering the amendment to the Urgent Supplemental Appropriations bill, H.R. 4515, which disapproves the President's Fiscal Year 1986 deferral of $700 million in rural housing funding last month.

Mr. Chairman, we strongly urge this subcommittee to adequately fund and support the Farmers Home Administration programs which have helped two million families, the elderly and the handicapped afford housing in rural areas where there often is no access to credit.

The President's budget not only calls for the $700 million deferral of rural housing program funds in Fiscal Year 1986 but seeks to eliminate funding for these programs in Fiscal Year 1987.

In its place, the Department of Housing and Urban Development (HUD) would provide 50,000 housing vouchers to be shared by both urban and rural households.

Housing vouchers will not assist in adding to the housing stock in rural America. Rural housing programs have already been cut approximately 40 percent since 1985. With the $700 million deferral, the Fiscal Year 1986 cut could reach 60 percent—in one year.

While deficit reduction remains our most important national priority, NAHB believes that any budget package should be fair and across-the-board.

Housing should not take a disproportionate share. The Administration's budget by no means meets that objective.

Mr. Chairman, a problem has also arisen concerning the Budget Reconciliation Act signed by the President last week.

This law gives full Fiscal Year 1985 funding levels to the Section 515 multi-family program of $900 million while cutting the Section 502 single-family program by 50 percent to $1.2 billion.

The Continuing Resolution passed last December funds Section 515 and Section 502 at $700 million and $1.4 billion respectively.

A question has arisen as to which law has priority and how the deferral would relate to the new law.

We hope this matter is expeditiously resolved with the highest possible funding so that rural housing programs are not further disrupted in the field.

We also hope that sufficient rental assistance will be provided for the Section 515 program in Fiscal Year 1987, not only to extend existing contracts, but to provide funding for new construction units.

Mr. Chairman, we should not lose sight of the fact that rural housing programs serve needy families and elderly who are unable to obtain credit from private lenders.

Under the Section 515 multi-family housing program, almost 70 percent of the tenants assisted have incomes below $6,000 with assistance reduced as income increases.

The Section 502 single-family program requires that 40 percent of all funds must go to borrowers with incomes at or below 50 percent of area median with the other 60 percent going to those at 80 percent of median or less.

Furthermore, the program calls for a recapture of the funds back to the Federal Government upon sale of the property.

Housing assistance under Section 502 is also reduced as an individual's ability to pay increases.

Economic growth is also generated by FmHA rural housing programs through jobs and taxes.

The 55,000 units built in Fiscal Year 1985 produced 70,000 jobs and $603 million in Federal, State and local revenue.

Successful cost containment measures are also essential to show that affordable Farmers Home housing can be built cost effectively.

NAHB is working with the Farmers Home Administration in developing effective cost containment regulations consistent with Congressional and Government Accounting Office concerns.

We feel, however, that existing homes should meet the same standards as new construction or not be allowed in the program.

In conclusion, Mr. Chairman, we urge Congress and this subcommittee to adequately support funding for rural housing programs and to maintain the current FmHA rural housing credit and delivery system.

Thank you for this opportunity to present our views. I will be happy to respond to any questions.

Mr. WATKINS. Let me assure you I am deeply interested in your testimony. I have had a very personal working relationship in rural America with trying to develop rural housing. I might say how I got into rural housing myself was by building houses in a community because an industry locating there needed housing for its employees.

In the entire area there was no subdivision started, no new housing subdivisions, for a couple of decades.

And I found out one of the key things needed was housing.

I am concerned about the talk of transferring rural housing to HUD. HUD doesn't even have a rural or small city program.

Secondly, they haven't accepted any responsibility for housing. Even Farmers Home expressed they didn't feel like it was their responsibility to provide housing in rural America.

And the fact is, as I have mentioned to Farmers Home people, that we do not have mortgage bankers in most of our counties. We do not have investment bankers, we don't have a delivery system for rural housing loans.

If we are going to have any type of housing in rural America, we must have a mechanism of financing. I think Farmers Home is probably the best delivery system, even with all its problems.

Mr. SMITH. There is certainly no question at all about that. There is some 500 counties that do not have savings and loans in them, existing in this country where people can go secure a loan.

I happen to live in a rural county in the State of Virginia. We have no S&L at all in our county to help those people in the farming community that need houses and so forth.

So, I couldn't agree more that it has fulfilled a need that is not being accomplished by other programs that we have in HUD.

Mr. WATKINS. I am going to yield to Mrs. Smith and let her continue the program. I have a group of people from Oklahoma in the next room that will testify about water development in the rural areas.

Mrs. SMITH. I will stay right here.

I appreciated your testimony very much.

If there is anybody in our Third Congressional District who wants to turn the housing over to HUD, I haven't met them yet.

You know that I have the second most agricultural district in the Nation, but I would like to ask you a question about something that pertains to what you talked about, but a little different angle.

Some of the home builders in my state would like for states like Nebraska to be able to pool their low income and have low income single family housing.

We don't have enough people who qualify for the very low income, and so we don't use all of that money. But if it could be pooled, it would be of great help to us.

You know, in the end when we don't use it all, then it is pooled nationally and shared with other states.

Would you have any comments on this?

Mr. SMITH. Well, we would like to see the money available to those that need it within the states.

There is no question about that. I would assume—and I don't know what our policy is on this at the moment—this question has not come up.

It certainly should be available to those folks in that state. You are certainly aware that sometimes politics entered into this and rural communities may not—if the funds are pooled on a different basis—may not be able to get what is needed in that particular area.

Our concern is that the money is available, and it is available in those neighborhoods that otherwise may not be available, and that the housing is provided for the people that need it.

It fulfills the obligation of providing housing for our country and our people.

Mrs. SMITH. Well, our home builders were in not long ago, and the Nebraska Home Builders feel very strongly about this.

They have spoken to me about it several times.

Mr. SMITH. We certainly recognize those folks from your state that are very supportive of our association and their needs.

We are sympathetic to them.

Mrs. SMITH. They are grateful. I meet with them regularly in Nebraska.

Mr. SMITH. Thank you.

Mrs. SMITH. So, thank you very much for being here.

Mr. SMITH. We appreciate the opportunity.

Mrs. SMITH. Now, we thank you and we appreciate your being here.

[Mr. Smith's statement follows:]

STATEMENT OF
THE NATIONAL ASSOCIATION OF HOME BUILDERS
before the
HOUSE APPROPRIATIONS COMMITTEE
SUBCOMMITTEE ON AGRICULTURE, RURAL DEVELOPMENT AND RELATED AGENCIES
on
RURAL HOUSING PROGRAMS

APRIL 15, 1986

Mr. Chairman and Members of the Subcommittee:

My name is David C. Smith and I am a homebuilder from McDowell, Virginia. I am testifying on behalf of the more than 138,000 members of the National Association of Home Builders (NAHB). NAHB is a trade association of the nation's homebuilding industry, of which I am President. I am pleased to be here to testify on the FY'87 appropriation for the Farmers Home Administration (FmHA) rural housing programs. It is a privilege to appear before you, Mr. Chairman, and to acknowledge your continued foresight and leadership in providing an effective housing delivery system to rural people.

I would also like to thank you for offering the amendment to the Urgent Supplemental Appropriations bill, H.R. 4515, which disapproves the President's FY'86 deferral of $700 million in rural housing funding last month.

FY'87 Funding

Mr. Chairman, we strongly urge this Subcommittee to adequately fund and support the Farmers Home Administration programs which have helped two million families, the elderly and the handicapped afford housing in rural areas. The conditions which gave rise to authorization for FmHA to make housing loans in 1949 still exist today, but the commitment to providing housing in rural areas is in serious doubt.

The President's budget not only calls for the $700 million deferral of rural housing program funds in FY'86 but seeks to again eliminate funding for these programs in FY'87. Rural residents are to obtain housing assistance from the Department of Housing and Urban Development (HUD) where only 50,000 vouchers are proposed to be shared by both urban and rural households.

While deficit reduction remains our most important national priority, NAHB believes that any budget package should be fair and across-the-board. It must include cuts in both defense and domestic spending and if necessary broad-based revenue raising measures. We will support a fair share of cuts in rural housing programs as long as they do not exceed the Gramm-Rudman-Hollings deficit reduction sequestration formula.

Effect of Cuts on Rural Housing Programs

Rural housing programs have already been cut approximately 40% since 1985. With the additional $700 million deferral the FY'86 cut increases to almost 60% -- all in one year.

As you are aware, Mr. Chairman, the President signed the Consolidated Omnibus Budget Reconciliation Act (P.L. 99-272) last week. This legislation provides $2.146 billion for rural housing programs compared with $2.128 billion contained in the Continuing Resolution Appropriation for rural housing programs last December.

The Budget Reconciliation Act also gives full FY'85 funding levels to the Section 515 multi-family program of $900 million while cutting the Section 502 single-family program by 50% to $1.2 billion. The Continuing Resolution funds Section 515 and Section 502 at $700 million and $1.4 billion respectively. A question has arisen as to which law has priority and how the deferral would relate to the new law. We hope this matter is expeditiously resolved so that rural housing programs are not further disrupted in the field.

The following chart shows these figures:

Rural Housing Funding

	RHIF	Section 502 SF Program	Section 515 MF Program
FY'85 Appropriation	$3.238 billion	$2.3 billion	$900 million
FY'86 Appropriation	$2.128 billion	$1.4 billion	$700 million
FY'86 Budget Reconciliation	$2.146 billion	$1.2 billion	$900 million
FY'87 Administration Budget	--0--	--0--	--0--

We also hope that sufficient rental assistance funds will be provided for the Section 515 program in FY'87 not only to extend existing contracts but to provide funding for new construction units. Without this assistance, many needy low income families and the elderly will be denied housing.

Rural Housing Has Already Taken Its Share of Cuts: Mr. Chairman, rural housing programs have already taken sizeable cuts. The total number of units assisted by FmHA has declined 50% from FY'80 to FY'86. If the loss of units from the $700 million deferral is included, the reduction amounts to almost 65%. The following chart shows the unit reductions:

Total Incremental Units Assisted
(Fiscal Years)

1980	1985	1986 (estimate	1986 (estimate with deferral)	FY'87 (Admin. Budget)
150,169	87,647	72,381	53,983	- 0 -

Source: FmHA; compiled by NAHB.

Need for Rural Housing

Rural housing programs serve only truly needy families and the elderly who are unable to obtain credit from private lenders. Under the Section 515 program, almost 70 percent of the tenants assisted have incomes below $6,000. Under the Section 502 program, the law now states that 40 percent of all Section 502 funds must go to borrowers with incomes at or below 50 percent of area median. If there is a safety net, surely it would be designed to meet the shelter needs of these low income people.

Rural housing under the Section 502 program is a limited assistance program: as the borrowers' income goes up, the assistance is reduced. When the home is sold, the assistance is recaptured. Assistance under the Section 515 program is also reduced as the ability to pay increases.

Economic growth is also generated by FmHA rural housing programs through jobs and taxes. The 55,000 units built in FY'85 produced 70,000 jobs and $603 million in federal, state and local revenue.

Demand for rural housing programs continues. According to the 1980 Census, there are over 2 million substandard units of housing in rural areas with half living on incomes below the poverty line. According to a Library of Congress report, "Housing in Rural Areas", substandard housing is two to five times greater in rural areas than in urban areas.

Additionally, according to a recent Government Accounting Office (GAO) report on the Section 502 program, "... a substantial need remains for housing among lower income rural households." There is no less demand for the Section 515 multifamily housing program.

HUD Transfer

There is no question that the transfer of rural housing programs to HUD would not be an effective way of servicing the housing needs of rural people. It is not really a transfer of programs to HUD; the existing Farmers Home programs are to be terminated. Rural and urban areas would then share whatever money is appropriated for a voucher system. Both rural and urban America would lose under this system. There is not adequate housing stock in rural areas for a voucher system to work and HUD has no experience in rural areas and could not duplicate FmHA's existing delivery system.

Lack of Credit in Rural Areas

It has been suggested that rural housing credit needs be financed by the private sector. Substituting the FmHA direct lending system with guarantees to private banks to make loans or establishing a block grant is flawed for a number of reasons.

First, many rural areas have no banks. Over 500 counties have no federal savings and loan institution. Rural areas have only 17% of the nation's savings and are not likely to lend to low income people who need substantial credit assistance. Second, a loan guaranty program has already been tried in rural areas and was not successful.

And finally, block grants depend on state governments or private credit to provide mortgage assistance. Home mortgages can be a risky investment for small rural lenders who are already facing delinquencies and foreclosures due to the federal funding cutbacks to states and weakening rural economies.

Program Improvements

Mr. Chairman, we recognize that there is a need for program improvements. I would like to take this opportunity to comment on both the proposed rule for FmHA mobile/manufactured homes and cost containment measures which are presently being considered by the Farmers Home Administration.

Energy Standards for FmHA Mobile/Manufactured Homes: We have serious reservations concerning the lenient thermal performance standards allowed under the proposed FmHA mobile/manufactured regulations which will increase operating costs for borrowers.

Low income families and the elderly do not have sufficient incomes to meet the high fuel costs predominant in many parts of of the country. In addition, the statutory requirement in the 1983 Housing Act which calls for the establishment of standards to reduce operating costs for borrowers by maximizing energy savings have been ignored in the regulations.

We hope that you will take the necessary action to assure that FmHA thermal performance standards will be adopted rather than the proposed Title II thermal standards at HUD. Affordability will increase and delinquencies will be reduced by this change in the regulations.

Cost Containment: NAHB has been pleased to attend meetings at the Farmers Home Administration to assist in developing effective cost containment regulations for Section 502 and Section 515 rural housing programs consistent with Congressional and Government Accounting Office (GAO) concerns.

We recommend that the cost containment provisions applied to new construction also be implemented for existing housing programs. If existing homes do not meet the new cost containment guidelines, they should not be allowed financing under FmHA programs.

During the transition to the new guidelines, however, exceptions must be made for new homes in inventory and loans which have already received conditional commitments. Loan assumptions should also be exempt to prevent market disruptions in the program.

Successful cost containment measures are essential to show that affordable Farmers Home housing can be built cost effectively in rural America.

Conclusion

Rural housing programs have had a record of great achievement in serving the shelter needs of rural Americans. They have provided an effective mortgage delivery system for new residential construction critical to providing needed accessibility to credit. They are providing the housing safety net for lower income Americans.

We urge Congress and this Subcommittee to adequately support funding for rural housing programs and to maintain the current FmHA rural housing credit and delivery system.

Thank you for this opportunity to present our views. I will be happy to respond to any questions.

TUESDAY, APRIL 15, 1986.

RURAL WATER PROGRAMS

WITNESS

THAD SHOWS, DIRECTOR, NATIONAL RURAL WATER ASSOCIATION

Mrs. SMITH. Now we have Thad Shows from the National Rural Water Association.

Your full statement will be in the record, and you may summarize or proceed in any way you wish.

Mr. SHOWS. Thank you.

I have a kind of laryngitis. I apologize.

Thank you, Mrs. Chairman, for having me here to appear before this important committee. I really think this is an opportunity to tell you something about rural water and the support that I have for it.

I am from the Mississippi Rural Water Association and also National Rural Water Association.

I am a director of both these organizations. I think the organizations are just doing a real vital role in providing services no other agency provides.

I think you have my full statement there as far as the record goes, but I want to highlight some of the things, summarize some of it here, that might be of interest to you.

In Mississippi, we are the second largest rural water state. We have just a few more than Oklahoma has. Texas, I think, is first. We have 838 rural water systems.

We are a very rural state and it is playing a vital part in our economy and the livelihood of the people and just the whole economic situation in the State.

A lot of people are building homes where there never was building before, because they have rural city water now that they are able to purchase.

We think the committee has done an excellent job in supporting the farms Home Rural Water Loan Grant Program. We think you all have done excellent in supporting the circuit rider program, national rural water circuit rider program, and we want to see that support continue.

I would like to stress today as my theme, we would like to continue this support. We would like to have your support and in one hundred percent of the programs for this coming fiscal year, because we do need that, because this is the only source of help that we have in the rural water system and people are very concerned.

I am a water well contractor and ground water geologist. I am very much concerned. Our resources disturb me greatly.

When I am out inspecting a system that is five years old and neglected and let run down to nothing, when you have the opportunity to give good service in it, you have to give poor service.

I think this Rural Water Systems Association is really the people that really go out and do something about this. They go out and really put their hands on pipe operation and actually help people individually on a one-to-one basis.

None of this is study or making research or anything, but we are actually there to solve the problems. And just recently we have had some real interesting problems in Mississippi where we have had to go in and help large systems that were in financial trouble.

And then we have small systems—doesn't matter who it is; if they give us a call and want us to assist we send the circuit rider, make an appointment, and go around and see the systems individually on a one-to-one basis.

The Farmers Home Administration program is very, very successful nationwide and also in Mississippi as far as losses are concerned.

I visited the State Farmers Home director before I came up here, yesterday, and he assured me that in Mississippi we only have about less than one percent loss pay back.

I think this is excellent money well spent, and I think that nationwide it is a very good program. We actually have this program in 34 states that we actually have circuit rider programs and managers and things that actually work with the rural water system.

We feel like the coming years are going to put a stress on rural water systems because of the reauthorization of the Safe Water Drinking Act and things they added to this act.

Just recently I had the opportunity to get some prices for a chemical analysis done on a job I was bidding on, and it requires the EPA standards and the new standards were on this particular job. And the price went from $500 to $1,400 just on the basic cost of getting the analysis performed.

Mississippi is a very, very rural state. We are having problems with our legislation in finding monies to do things. A lot of free services we have experienced in the past are being cut out. We are having the individual systems may have to start paying for some of these tests.

So those are the things facing us in the future. So we want to see them run this system in a very, very good way. We are very proud of the fact that we had a $340 million budget last year, with $2.1 million for the national circuit rider, and we hope to have the same type program for the coming year.

As I mentioned, we have the on-hand, on-site type jobs we expect our people to get there, and they do. They get out and actually help.

And I have several instances recorded where we have actually performed real services.

If Congressman Whitten was here I could brag on. In his district—we were just there and served a rural water system and also a town there.

We saved the rural water system approximately $2,000 because we could fix a valve, show them how to fix the valve. And the rural town man—they just hired a new man. He didn't know how to fix leaks, and they didn't ask any qualifications; they said, "Go fix the leak."

We were able to help them teach them how to fix leaks, so we feel like we are on the job and doing a good job.

Mississippi just recently enacted the mandatory certification. We just got that passed a few weeks ago. This is going to require every water system in Mississippi to have the mandatory certification and have to be certified—all grandfather clauses, all of them will be certified.

But to maintain certification they have to take so manv points and so many classes we were able to get written into law. We are very proud of that.

We are supportive of other certification programs. We feel like upgrading the State, and we were going to do it before the Federal Government came in and made us go it. We were going to do it on a voluntary basis because we knew it was very much needed.

I think I have kind of hit some of the highlights here, and I would like to thank this committee for its support in the past, and I look forward to continued support.

If you have any questions I would be glad to answer them.

Mrs. SMITH. Let me welcome you here and let me also tell you we are sorry Mr. Whitten is not able to be here.

You may be aware that he is in New York attending the funeral of a dear friend and colleague. That explains why we have really a small attendance this morning.

But Mr. Whitten will be reading your statement with a great deal of interest, because he has a tremendous interest in the program. He has often told us how fine it is.

I like many things about what you said, about how the circuit riders really get out and work on a hands-on basis.

I noted in my own state we had 456 circuit rider visits during this last year. I also noted you said that they do something. They don't study. They are aware. We study and study and don't do enough.

Also, I was concerned about your comment. I have worried about this new law, and what it might do to the costs out in the rural areas.

As you say, the water analysis costs went from $500 to $1,400.

Mr. SHOWS. That is correct.

Mrs. SMITH. This is very significant and something that this committee will need to be giving careful attention to.

So, we appreciate your being here.

Mr. SHOWS. Yes, when you make a law or change something, it certainly costs a lot more to get something and get more results.

We are not saying it is not needed. We are saying the cost for that program is going to be more important in the future, you know, for helping these people.

Mrs. SMITH. We have to weigh what is really needed and be sure we aren't excessive and don't build up the cost too much.

So, we are glad you came. Thank you for being here.

Mr. SHOWS. Thank you so much.

[Mr. Show's statement follows:]

Mr. Chairman, thank you for allowing me, as a representative of the National Rural Water Association and the Mississippi Rural Water Association, to appear before this important Committee today. I am a member of the National Rural Water Association Board of Directors and a member of the Board of the Mississippi Rural Water Association. We want to express our deepest appreciation for the help you have provided in the past for the Farmers Home Administration rural water grant and loan program and for our special rural water circuit rider technical assistance program. We are here today to request the continued support of you and the Committee for these two very important rural programs.

We would also like to thank you for the help you gave many small rural water systems with the provisions this Committee included in P.L. 99-88 which now allows water systems to utilize the lesser interest rate available at either the time of the closing of a loan or the loan commitment. This has allowed many hard-pressed small water systems to move ahead with long pending loans over the past three months which are needed to improve operation of their facilities and the quality of their water.

We are requesting your continuing help today because rural water systems are facing their most difficult times in history. The Congressional reauthorization of the Environmental Protection Agency's Safe Drinking Water Act (SDWA) again places an emphasis on the monitoring and testing of the water quality in small rural water systems. The reduction in FmHA grant and loan funds over the past four years has seriously limited the amount or assistance available to improve the quality of small systems and to expand water service to more marginal rural areas. Finally, as many systems become older there is an increasing need to upkeep and maintain rural water systems to protect the enormous investment made by FmHA and local rural communities.

The renewed funding of the FmHA water and sewer grant and loan program and the continuation of the grassroots rural water circuit rider technical assistance program will go a long way in helping resolve these deep concerns. The grant and loan funding is critical, because it is the only viable source of financing available to the majority of non-profit rural water systems. Rural water districts do not have the legal standing to float bonds, levy taxes or seek other types of public financing. Private financing has seldom been an alternative because of its high cost and consistent unavailability. Yet, the repayment rate on water and sewer loans exceeds 99.5% and we don't know of any water system that has defaulted resulting in the government losing money. This is probably the soundest government loan assistance program in the nation.

These grants and loans allow systems to repair and improve equipment to meet SDWA standards, to expand water service to hard-to-reach areas and allow rural communities to provide the type of water service required to retain industry, business and commercial activities. There are 859 FmHA-assisted rural water systems in Mississippi which form the backbone of rural community life. Without good water rural America and rural Mississippi become uncompetitive and without the FmHA grant and loan program rural water systems lose their primary source of funding and financial assistance. The backlog of requests for assistance is over twice the amount that was available last year. Any decrease in the funding level would further aggravate this backlog in available funds. Rural America, very badly, needs a rural water and sewer program at the $340 million loan and $115 million grant level.

The second area of our concern is the assistance available to help improve the operation and maintenance of existing rural water systems. Most rural water systems were developed because neighbors got together and decided that something had to be done about the poor quality or lack of water. These people formed water districts, signed up customers, borrowed funds from the only source available - FmHA - and set up a small water system operation with part-time personnel. As you know Mississippi was able to utilize this program to provide rural water throughout our state.

Repair and maintenance were often carried out by local users on a part-time basis. The planning for and construction of water systems at this level has been relatively simple compared to the major governmental and utility organizations required to operate and maintain the rural telephone, rural road and rural electric systems. As a result, up until about ten years go rural water systems had little interest or reason for working together to identify and solve common problems.

However, rural water systems began to face an entirely new set of problems with the passage of the Safe Drinking Water Act (SDWA) in 1974 and the increased demand by rural residents for better drinking water. Rural water systems have had to adjust to the increased environmental pressures caused by an expanding rural population and how to improve the quality of water supply in what has been a small scale non-profit operation. It is in this context, that about ten years ago, most small rural water systems began to organize themselves into state rural water associations in order to begin to discuss common problems they were facing in a more complicated environmental world.

These systems were as varied in their size and structure as rural America itself. Many users were still small 'mom and pop' operations, others had grown from a few hundred households to several thousand while many small towns were having serious operational problems with old and worn out water systems. The common problem among those systems was the need to improve the quality of the water while continuing to provide water in the most cost effective manner possible.

What evolved from this need is the rural water circuit rider technical assistance program now operating in thirty-three states.

A full-time rural circuit rider, working under the oversight of each state rural water association, was made available to provide hands-on assistance and guidance to all rural water systems in the state regardless of size or problem. This allowed many rural systems to steadily improve the efficiency of their operation and the quality of the water delivered. Circuit Riders have saved significant amounts of money in preventing water loss, reducing the need for replacement of pipes, pumps and other equipment and in working with systems to set adequate water rates to provide funds for continuous preventive maintenance.

For example, in Kentucky, over the past year, approximately $619,841.00 was saved in water loss in 68 water systems (based on 826,455,600 gallons saved at a conservative estimate of 75 cents per 1,000 gallons.) This was the result of an aggressive water leak detection program by the circuit rider which provided on-site guidance to rural water systems - and equipment for them to use - for the purpose of identifying and repairing leaks. This same program has produced similar benefits from New York to Alabama and from Utah to Maine. While this is but one small example of the grassroots effectiveness of the circuit riders, it is typical of the impact that circuit riders are having on improving SDWA compliance, preserving water sources, saving operating costs and strengthening the overall performance of all rural water systems.

Attached to this testimony is a chart describing the number of visits made by the Circuit Rider in each state and the type of technical assistance provided. There have been over 14,982 visits made to rural water systems throughout the thirty-three states this past year. We invite all of you to come spend some time with a circuit rider when he visits a small rural water system. We believe you will appreciate the value of the direct relationship between the circuit rider and the water system and the success the hands-on approach has in solving small water problems.

In closing, we want to again thank you for your past support of rural water and to urge you to maintain the funding level for the FmHA rural water loan program at the $340 million level and the FmHA grant program at $115 million. We are requesting that the NRWA Circuit Rider program be maintained at a level of $2.1 million which will allow NRWA to provide circuit rider assistance through the state rural water associations.

CIRCUIT RIDER TECHNICAL ASSISTANCE VISITS:
October 1, 1984 to September 30, 1985

	TOTAL	OPERATION	MAINTENANCE	MGMT	FINANCE	COMPLIANCE
ALABAMA	413	337	18	38	16	4
ARKANSAS	443	193	193	51	6	0
COLORADO	474	215	100	147	7	6
FLORIDA	483	249	51	121	17	51
GEORGIA	435	271	76	81	7	0
ILLINOIS	458	139	201	70	30	23
INDIANA	447	167	114	159	4	3
IOWA	505	368	25	103	4	5
KANSAS	445	215	48	165	7	11
KENTUCKY	507	277	196	17	0	28
LOUISIANA	498	146	105	108	108	38
MAINE	453	200	145	75	21	12
MINNESOTA	442	219	143	46	28	0
MISSISSIPPI	640	90	188	361	1	0
MISSOURI	435	132	218	81	2	2
MONTANA	451	129	115	198	2	9
NEBRASKA	456	142	162	82	65	5

CIRCUIT RIDER TECHNICAL ASSISTANCE VISITS:
October 1, 1984 to September 30, 1985
Page 2

	TOTAL	OPERATION	MAINTENANCE	MGMT	FINANCE	COMPLIANCE
NEW MEXICO	509	25	420	21	35	10
NEW YORK	421	229	175	16	0	1
NORTH CAROLINA	421	155	180	86	0	0
NORTH DAKOTA	463	220	136	87	13	9
OHIO	410	107	142	152	7	2
OKLAHOMA	436	107	15	291	13	15
OREGON	424	207	135	13	33	43
SOUTH CAROLINA	441	210	69	137	17	8
SOUTH DAKOTA	472	209	117	106	31	10
TENNESSEE	549	162	182	180	0	26
TEXAS (1)	426	136	46	170	3	0
TEXAS (2)	322	140	94	175	23	2
UTAH	553	91	271	134	6	56
VERMONT	435	231	161	9	19	17
WYOMING	469	157	174	52	19	73
	14,982	5,896	4,447	3,723	547	469

TUESDAY, APRIL 15, 1986.

RURAL WATER AND WASTE DISPOSAL

WITNESSES

GERARD KENNY, PRESIDENT, NATIONAL UTILITY CONTRACTORS ASSOCIATION

DAVID MCDERMITT, DIRECTOR, NATIONAL UTILITY CONTRACTORS ASSOCIATION

Mrs. SMITH. Gerard Kenny and Mr. McDermitt.

Mr. KENNY. Thank you very much, Mrs. Chairman.

As President of the National Utility Contractors Association, or NUCA, I represent 2,000 companies nationwide that specialize in water delivery and wastewater treatment project construction.

I represent people, the people that are involved in the business and the people we serve, the hundreds of thousands of people that are members of the NUCA family, mothers, fathers, children and grandchildren.

We are trying to pass on to them something that we picked up and was given to us as a generation.

Because many of the systems built by our members are financed through the Farmers Home Administration's Water and Waste Disposal Grant and Loan Program, I will take this opportunity to briefly offer the construction industry's views on the program.

I begin by expressing the industry's staunch opposition to President Reagan's plan to terminate funding for this important program in Fiscal Year 1987.

Studies in recent years indicate that some $200 billion must be spent on public water delivery and sewage treatment systems within the next fifteen years, because along with this opportunity for us to go into the year 2000 as the leading economic country in the world, we also have a greater deal of responsibility to give to the future generations of this country than what has been given to us in the past.

What has been paid for by past taxpayers must be paid for now by the current taxpayers, so the future may continue and the United States may remain strong in the farm and industrial communities.

Despite these acknowledged needs, the Reagan Administration's Fiscal Year 1987 budget request for the major federal programs that finance the construction of these systems represents a staggering 57 percent reduction from congressional appropriations as recently as 1980.

Specifically, the reduction is from $6.63 billion in Fiscal 1980 to the proposed 1987 total of $2.85 billion included in the President's budget request for these programs.

A breakdown of these figures is included on page two of my written testimony. FmHA statistics also reveal that the total number of grants and loans to rural communities has dropped dramatically from 1,825 to just 783 in Fiscal 1985—more than a 50 percent decrease.

Unfortunately, State and local governments have been unable to pick up the slack in funding. It is also important to note that pending tax reform proposals to impose additional restrictions on municipal development bonds would exacerbate this financing problem facing rural communities by limiting their local funding resources.

In addition to financing water supply projects, the Farmers Home Administration's program has proven to be a particularly important source of financing wastewater treatment construction needs mandated by the Federal Clean Water Act.

The Federal Government is requiring communities across the nation to comply with tough water quality standards, but fewer EPA construction grants are going to rural communities.

At the same time, however, EPA is stepping up its enforcement policy against all communities and is requiring them—often through the use of court orders—to build the sewage treatment systems necessary to meet Federal water quality standards.

In essence, the agency is saying to communities, "You must build the facilities required to meet Federal standards. How you pay for them is your problem."

The Farmers Home Program is often the only safety net available to these rural communities with no other source of construction financing.

Before summarizing, I want to point out a problem that arose in 1985 as a result of new regulations governing Farmers Home Administration grants.

Because of a ruling by the Comptroller General of the United States, communities are now prohibited from using a FmHA grant to help satisfy the local share requirements of another Federal grant-in-aid program.

Many communities have traditionally made use of a Farmers Home grant award during the past decade to help them meet the local share of construction costs necessary to receive an EPA grant for the construction of a sewage treatment system.

Successfully combining EPA and FmHA funds over the years has resulted in the construction of a number of rural sewage treatment systems that would otherwise not have been built.

This concept was proving to be even more important since October of 1984 when the local share required by EPA was increased to 45 percent of total construction costs.

While the number of affected communities is relatively small, it is the poorest communities that have suffered the most as a result of this regulation.

Mrs. Chairman, NUCA is very close to winning final congressional approval for language formally authorizing Farmers Home to use its grants for this purpose.

Until that is achieved, however, we strongly urge the committee to include language in its Fiscal 1987 agriculture appropriations bill specifically permitting the use of FmHA grants for this function.

In summary, I implore the committee to appropriate $455 million in Fiscal 1987 appropriations for the FmHA Water and Waste Disposal Program—a level equal to that of recent years.

Like any responsible business group, the National Utility Contractors Association supports a balanced Federal Budget. But given the fact that the Administration's budget requests for water and sewer construction programs would result in a 57 percent reduction in Federal funding from 1980 levels, we feel strongly that this area of the Federal budget has already been pared to the bone.

Funding for this program is an investment in the future economic growth of the nation's underdeveloped regions. The program is important, it is efficient, and above all, it is working.

Thank you for your attention, and I will be happy to answer any questions you may have at this time.

Mrs. SMITH. We appreciate your being here very much, and I know what you are talking about is extremely important.

Of course, you know that this committee is under strict budget restrictions this year, but we are going to try very hard to fund all these most important programs. And you pointed out that this is an investment in the future itself, and we are going to do the very best that we can.

You brought up several serious concerns, and one that has bothered me a great deal is the tendency of the Federal Government to tell you how you must do it and how you must live by their rules, but we don't supply the money.

I am well aware that EPA is stepping up its enforcement policy and making it more expensive for the local communities by not supplying funds, and this is certainly something that Congress has to address very carefully.

But we appreciate your testimony, and I will certainly see to it that when we are marking up this bill we give careful thought to the problems that you talk about in regard to the fact that we can no longer use EPA grant money as a part of the local funding for a project.

Mr. KENNY. I appreciate your paying attention to that, because that was the key point and you picked up on it.

The other key point would be fund at the level of $455 million. It is vitally necessary that this investment be made.

Mrs. SMITH. I picked up on that. We are going to do the very best we can.

Mr. KENNY. I appreciate it. Thank you.

[Mr. Kenny's statement follows:]

NATIONAL UTILITY CONTRACTORS ASSOCIATION
(NUCA)

Represented by

Gerard Kenny
Kenny Construction Company
Wheeling, Illinois
and
President
National Utility Contractors Association

Fiscal 1987 Appropriations -
Farmers Home Administration
Water & Waste Disposal Grant & Loan Program

House Appropriations Subcommittee on
Agriculture, Rural Development & Related Agencies
April 15, 1986
Washington, D.C.

The National Utility Contractors Association
Suite 606, 1235 Jefferson Davis Highway
Arlington, Virginia 22205

Mr. Chairman and members of the Committee, the National Utility Contractors Association (NUCA) is comprised of 2,000 contractors, suppliers and manufacturers nationwide that specialize in water delivery and wastewater treatment construction projects. Many of the water and sewer systems built by our members are financed through the Farmers Home Administration (FmHA) Water and Waste Disposal grant and loan program.

As a result of our work in constructing the facilities funded by this important program, I will take this opportunity to offer the construction industry's views on the program and its effectiveness.

I begin by expressing the industry's staunch opposition to President Reagan's plan to terminate funding for the Water and Waste Disposal program in fiscal 1987.

The nation has been alerted over recent years to the impending infrastructure crisis facing all areas of the country. Studies indicate spending for our system of public works must be dramatically increased at all levels of government just to keep pace with current needs. Water delivery and wastewater treatment systems account for a large share of these projected construction needs. A highly respected 1984 study by the Congressional Joint Economic Committee estimates more than $200 billion alone must be spent on these two areas of construction by the year 2000. Similar studies by the Environmental Protection Agency and other groups support these figures.

Sharply Reduced Federal Funding

Despite these acknowledged needs, however, a survey by our association reveals that the Reagan administration's fiscal 1987 budget request for the major federal programs that finance the construction of water delivery and sewage treatment systems represents a staggering 57% reduction from Congressional appropriations for these programs in fiscal 1980. Specifically, the reduction is from $6.63 billion in 1980 to the proposed 1987 total of $2.85 billion included in the President's budget request for these programs. A breakdown of these figures follows:

FEDERAL WATER/WASTEWATER CONSTRUCTION SPENDING

Program	Fiscal 1980 Appropriations	Fiscal 1987 Request	Decrease
Farmers Home Administration (FmHA) Water/ Waste Disposal Program (total grants & loans)	$990 million	-0-	$990 million (-100%)
Economic Development Administration (EDA)	$582 million	-0-	$582 million (-100%)
Environmental Protection Agency (EPA) Construction Grants	$3.4 billion	$1.8 billion	$1.6 billion (-47%)
Corps of Engineers (civil works program - construction funding only)	$1.66 billion	$1.05 billion	$61 million (-37%)
TOTAL =	$6.632 billion	$2.85 billion	$3.78 billion (-57%)

FmHA statistics also reveal that the total number of grants and loans to rural communities has dropped from 1,825 in 1980 to just 783 in fiscal 1985 -- more than a 50% decrease.

Have state and local governments picked up the slack? Unfortunately not, as records indicate public construction as a percent of total construction volume is lower now than at anytime since 1947. Sharp drops in the public share of new construction in recent years have lowered the public share to 17.9% in 1984 -- far below the 30% share as recently as 1975. In fact, the total annual expenditure by the federal, state and local governments for public capital investment projects has declined by more than 50% in just the last 15 years.

In addition to cutting back federal appropriations for these programs, impending tax proposals would exacerbate the problem facing rural communities by limiting their ability to finance construction work through their local resources. Restrictions on municipal development bonds and other proposals expected to be an integral part of the final tax reform package would further hinder the opportunity for local communities to finance construction.

Perhaps the truest indicator of the continued need for this FmHA program is the number of preapplication and unobligated applications pending as of the first week in April. A total of 1,645 applications for grants and/or loans totaling $953 million is now awaiting action (and funding) at Farmers Home headquarters.

The number of pending applications is nearly identical to those on hand one year ago, while the total dollar amount has risen $32 million during that time. These figures indicate that despite the $455 million appropriated by Congress for fiscal 1986, rural communities still have an acute and urgent need for water and sewer system construction financing.

The benefits derived from the Water and Waste Disposal program can generally be classified under the headings of economic development and public health.

Economic Growth and Public Health

Funding for this program must be viewed in budgetary terms not as a liability but as a long-term asset because it represents an investment in the future economic growth of the nation's underdeveloped areas. A sound network of water delivery and sewage treatment facilities is essential to the economic growth of these rural areas. Studies indicate businesses and industries place the condition of an area's sewer and water system near the top of their list of criteria in determining whether to build, expand or relocate.

Perhaps the most alarming statistic estimates that 46% -- nearly one half -- of the nation's communities are unable to add additional businesses and residences onto their sewage treatment systems because they are already operating at full capacity. It has been the experience of many of our member companies located in rural areas that vitally needed businesses that could provide an infusion of capital and employment opportunities into the local economy locate elsewhere due, at least in part, to inadequate water and sewer facilities.

Adequate funding for this FmHA program is also necessary to meet the needs of the public health. Due to inadequate funding to finance pipeline and treatment construction, many rural communities rely on septic tanks for sewage disposal and underground wells for water. Currently, approximately 60 million Americans are without sewer service. The alternative is largely the use of septic tanks. When operated and maintained properly by owners living on suitable soil, septic tanks can provide a cheap and efficient method of waste disposal. However, studies indicate that at any one time, 20 to 60 percent of the septic tanks in the United States are malfunctioning.

More importantly, malfunctioning tanks are a major source of both groundwater and surface water pollution. The National League of Cities, in previous testimony before Congress, noted that the use of septic tanks can lead to groundwater pollution, local and regional public health problems and contamination of water supplies. One alternative is a soil collector or absorption system. However, for 68% of municipalities with populations of under 10,000, the soil conditions are unsuitable for a soil absorption system.

Water Pollution Control

Over the years, the FmHA Water and Waste Disposal program has also proven to be an important source of financing wastewater treatment construction needs mandated by the federal Clean Water Act. Farmers Home officials report a significant percentage of the programs's funding is used to assist poor communities in financing the 45% local share required to receive an EPA grant under the EPA construction grants program. Any reduction in FmHA funding would surely result in a slowdown in our nation's water pollution control battle.

It is also important to know that an increasing percentage of EPA sewer construction funding is now awarded to largely urban communities for treatment plant construction. Only a small percentage is now being used to construct sewer pipeline systems, such as collector pipelines. This policy penalizes small rural communities because pipeline costs represent 80% of the total project cost in small municipalities. In high density urban areas, however, pipeline construction accounts for only 15 to 20% of treatment systems costs.

As a result, fewer EPA construction grants are going to rural communities. At the same time, however, EPA is stepping up its enforcement policy against all communities and is requiring them -- often by using court orders and other administrative powers -- to build the sewage treatment systems necessary to meet federal water quality standards. In essence, the agency is saying to communities, "You must construct the facilities required to meet water quality standards in your area. How you pay for it is your problem." The FmHA program is often the safety net for these communities with no other available source of construction financing.

FmHA - EPA Financed Projects

Before summarizing, I want to point out a problem within the program that has arisen as a result of regulations promulgated in 1985 governing FmHA water and waste disposal grants. Because of a ruling by the Comptroller General of the United States, communities are now prohibited from using a FmHA grant to satisfy the local share requirements of another federal grant-in-aid program. NUCA strongly urges the committee to adopt language in its fiscal 1986 appropriations bill permitting the use of FmHA water and waste disposal grants for this purpose.

Since the inception of the EPA Construction Grants program over a decade ago, many rural communities have used a Farmers Home Administration grant to finance their EPA-required "local share." Combining these two sources of federal funds has resulted in the construction of rural sewage treatment systems, many of which would not have been built without the assistance of a FmHA grant. Many communities have traditionally made use of a FmHA grant award for this purpose during the past decade.

This restrictive regulation promulgated by FmHA in accordance with the Comptroller General's edict is particularly harmful for some communities because of the increase in the local share requirement for wastewater treatment projects financed by EPA. As part of the 1981 Clean Water Act Amendments, the 25% local share was increased to 45% effective October 1, 1984. NUCA members report that some communities, particularly those in rural areas, have designed projects that are ready to go to construction. The projects have been delayed or postponed, however, because they are unable to meet the 45% local share requirement necessary to receive a 55% EPA grant.

While only a relatively small number of communities have been affected in proportion to the overall number of FmHA grant and loan recipients, it is the poorest communities -- those unable to secure other sources of construction financing -- that have suffered the most as a result of this regulation.

NUCA was instrumental in winning final approval for language included in the Food Security Act of 1985 (the farm bill) authorizing the use of FmHA grants to help communities satisfy the local share requirements of another Federal grant-in-aid program if authorization is also granted by EPA authorizing legislation. Language is also included in H.R. 8 (the Clean Water Act Amendments), which has been approved by the House of Representatives, authorizing the use of FmHA grants for this purpose. Until this language is approved by a House - Senate conference committee and the President, however, communities are now prohibited from using a Farmers Home Administration grant to help meet their EPA local share.

A traditional source of financing has been made unavailable to poor rural communities in recent months because of this regulation. Therefore, we strongly urge the committee to include language in its fiscal 1987 agriculture appropriations bill permitting the use of FmHA grants for this important purpose.

Summary

Mr. Chairman and members of the committee, I conclude by imploring you to appropriate an adequate amount of funding in fiscal 1987 for the FmHA Water and Waste Disposal program. A funding level of $455 million, equal to that of recent years, is certainly reasonable and responsible in light of the current need for this construction financing and the benefits derived from it. Under the outstanding administration of the program by John Bowles, Acting Assistant Administrator for Community and Business Programs, and James Schwartz, Director of the Water and Waste Disposal Division, the program has efficiently and expeditiously made the grants and loans necessary to build these vitally-needed projects. The loan delinquency rate of less than 2% is just one indication of the effective administration of this program.

As any responsible business group, the National Utility Contractors Association (NUCA) supports a balanced federal budget. But given the figures cited earlier in my testimony, which indicate a 57% reduction in federal funding for these water and sewer construction programs, we feel strongly that the construction area of the federal budget has already been pared to the bone. Further reducing or eliminating funding will not reduce the need for this financing, it will only postpone construction -- and postponing construction leads to even greater costs and higher prices in the future.

This program is important, it is efficient and, above all, it is working. I strongly urge you to continue your past support for adequate funding in fiscal 1987 and beyond. Thank you for granting me the opportunity to appear before you here today, and I will be happy to answer any questions you may have at this time.

TUESDAY, APRIL 15, 1986.

RURAL HOUSING PROGRAMS

WITNESSES

JOSEPH A. SHEPARD, PRESIDENT, COUNCIL FOR RURAL HOUSING AND DEVELOPMENT

ANNA MOSER, EXECUTIVE DIRECTOR, COUNCIL FOR RURAL HOUSING AND DEVELOPMENT

Mrs. SMITH. Mr. Joseph Shepard, proceed as you wish. If you want to, introduce the lady with you.

Mr. SHEPARD. My name is Joseph A. Shepard. I am Chairman and Chief Executive Officer of the Lockwood Group, a service real estate firm that specializes in the development of rural multifamily housing.

I appear before you today in my capacity as President of the Council for Rural Housing and Development.

I am accompanied by Ann Moser, our Executive Director.

We appreciate the opportunity to address you on the most important topic of housing for rural America.

Last year CRHD appeared before you and reported on the dire housing shortage and poverty of rural America.

This year I regretfully must report again on the continuing great need for housing in rural America.

Even more regretfully, I must do this in the face of continuing threats to our budget from the Administration which for the second year in a row proposes to eliminate the Farmers Home Administration's rural housing programs.

The Section 515 program performs a vital function today by filling a desperate need for decent, safe, and affordable housing.

In the FmHA service area there are over two million occupied housing units that are "substandard", meaning they lack adequate plumbing and/or are overcrowded.

Eight hundred and fifty thousand households with income below the poverty line live in such housing. According to FmHA, in February 1986, the average income for a resident in a Section 515 project was $8,050. The income for the very low income tenants was $5,969.

Although housing needs are the greatest in rural America, the supply of credit to meet those needs is simply not there.

Over 550 rural counties do not have federally chartered savings and loans. Rural banks' per capita assets average only $3,400, less than half of the $7,000 per capita average in urban areas.

Section 515 loans are made only after it has been proven that conventional financing is not available.

It is this mismatch of high need and low resources that impelled Congress to create the Section 515 program.

Since its inception in 1963, the program has provided over 360,000 units of rental housing, serving over 790,000 elderly and low income citizens.

The program has been tremendously cost efficient and has an excellent track record.

In 1985, the average cost per unit was less than $31,500, down from last year and well under the average cost for new rental units.

The Section 515 program is not a grant program; every loan is secured by a mortgage on the assisted housing and will be repaid. Defaults are less than one percent, a record unmatched by any other Federal housing program.

Money spent on Section 515 creates a community asset that lasts for many years as opposed to one shot assistance under most social service programs.

In 1985 the Section 515 program was reduced from its previous years appropriation of $940 million and funded at only $900 million.

In Fiscal Year 1986, the program was cut to $700 million. We believe we have contributed to reducing the Federal deficit and further reductions in funding would be grossly unfair.

The Administration has requested a deferral of $700 million in Fiscal Year 1986 rural housing funds, $233 million of which would come from the Section 515 program.

We commend you for your prompt action to disapprove this deferral by including language to that effect in H.R. 4515.

We urge you to do everything in your power to ensure that this legislation moves swiftly through Congress with the disapproval language intact.

Right now, FmHA has hundreds of Section 515 loan applications stalled because of this deferral request and several states are not able to obligate loan funds at all.

Since the authority for the program expires on September 30 and the Administration has requested no funding for the program in Fiscal Year 1987, we believe this action, in fact, constitutes a recission rather than a deferral, that attempt to circuitously thwart the will of Congress.

In addition, as you know, the Reagan Administration has once again proposed to eliminate all rural housing programs in Fiscal Year 1987, and place responsibility for rural housing with the Department of Housing and Urban Development. CRHD opposes the Administration's proposals for several reasons. Several of these reasons are stated in my remarks.

Congress has supported the Section 515 program in the past and we urge you to do so again in Fiscal Year 1987 at the Fiscal Year 1986 level of $700 million.

The program represents a highly successful public private partnership and should stand as a model for what can be done to benefit all Americans when the Federal Government provides the impetus for responsible private participation.

Thank you. I would be happy to answer any questions.

Mrs. SMITH. Thank you for being here, and that certainly was excellent testimony.

Let me say that we are under strict budgetary considerations, but we are going to try to do the very best that we possibly can with the very, very important programs that come before us.

Let me say to you that I come from the second most rural congressional district in the country. I have yet to hear any one person who is interested in changing the rural housing over to HUD, and I don't think that is anything that is going to happen.

I appreciated your point, particularly that when you build a new house you have a project for years that is going to upgrade life for years and this average cost of $31,000 shows that it is being done very efficiently in these current times.

Now, I would like you to comment on something that the Home Builders of Nebraska would like to see done.

We have not been using all of our very low income money, because we don't have enough people who qualify and who seem to want it.

We certainly could use more of the low income housing money. Our home builders would like to have permission in the law to pool those two programs in a state where the local people want them pooled.

Would you have any comment about that?

Mr. **Shepard**. I am not real clear on the very low income.

Mrs. **Smith**. You said here that the average income for the very low income tenant was $5,900.

Mr. **Shepard**. That is correct.

Mrs. **Smith**. We don't have enough people who apply and qualify for this very low income housing so we always turn some of it back, and the upshot of that is we don't get the money in Nebraska. It is pooled nationally.

Mr. **Shepard**. Perhaps you are referring to the 502 program and 515 program. I must say that I would not support that. I believe that the 515 program is very important, for it stands on its own and reaches those lower income people.

I might mention, because of the need that we see, I as a developer have gotten involved in your State of Nebraska and currently have several projects in the hopper.

I can't comment on the overall allocations there in Nebraska, but the 502 is a wonderful program. There is no question about it.

But it does not address the needs of the needy of the lowest income people, whereas the 515 program, which is rental housing program as opposed to home ownership program, does.

I would be more than happy to get into it with you.

Mrs. **Smith**. I was passing on what the home builders in my state—they feel it would be an improvement.

Thank you. We appreciate your testimony very, very much.

Mr. **Shepard**. Well, thank you very much, and I appreciate the opportunity.

[Mr. Shepard's statement follows:]

Council For Rural
Housing And Development

TESTIMONY OF JOSEPH A. SHEPARD, PRESIDENT,
COUNCIL FOR RURAL HOUSING AND DEVELOPMENT
BEFORE THE HOUSE AGRICULTURE, RURAL DEVELOPMENT,
AND RELATED AGENCIES SUBCOMMITTEE ON APPROPRIATIONS

Mr. Chairman and members of the Subcommittee, my name is Joseph A. Shepard. I am Chairman and Chief Executive Officer of the Lockwood Group, a service real estate firm that specializes in the development of rural multifamily housing. I appear before you today in my capacity as President of the Council for Rural Housing and Development. I am accompanied by Charles L. Edson, Lane and Edson, P. C., CRHD Counsel. We appreciate the opportunity to address you on the most important topic of housing for rural America.

The Council for Rural Housing and Development is an association of over 160 members, including eleven state associations, actively involved in the Section 515 rural rental housing program. Since its formation in 1980, the Council has been active in the legislative process and has worked closely with the Farmers Home Administration in the regulatory area to help protect and improve the Section 515 program. I think FmHA would agree that the close working relationship we have developed is one of mutual benefit.

Rural Housing Need

Last year CRHD appeared before you and reported on the dire housing shortage and poverty of rural America. This year I regretfully must report again on the continuing great need for housing in rural America. Even more regretfully, I must do this in the face of continuing threats to our budget from the Administration which for the second year in a row proposes to eliminate the Farmers Home Administration's rural housing programs.

The Section 515 program performs a vital function today by filling a desperate need for decent, safe and affordable housing. In the FmHA service area there are over two million occupied housing units that are "substandard", meaning they lack adequate plumbing and/or are overcrowded. 850,000 households with incomes below the poverty line live in such housing. According to FmHA, in February 1986, the average income for a resident in a Section 515 project was $8,050. The average income for the very low income tenants was $5,969.

2300 M Street, Northwest, Fourth Floor, Washington, D.C. 20037 (202) 955-9715

Although housing needs are the greatest in rural America, the supply of credit to meet those needs is simply not there. Over 550 rural counties do not have federally chartered savings and loans. Rural banks' per capita assets average only $3,400, less than half of the $7,000 per capita average in urban areas. Section 515 loans are made only after it has been proven that conventional financing is not available.

Section 515 Activity

It is this mismatch of high need and low resources that impelled Congress to create the Section 515 program. Since its inception in 1963, the program has provided over 360,000 units of rental housing, serving over 790,000 elderly and low income citizens. The program has been tremendously cost efficient and has an excellent track record. In 1985, the average cost per unit was less than $31,500, down from last year and well under the average cost for new rental units. The Section 515 program is not a grant program; every loan is secured by a mortgage on the assisted housing and will be repaid. Defaults are less than 1%, a record unmatched by any other federal housing program.

The Section 515 program often presents the only hope for many rural Americans in dire need of housing. However, the program does more than just provide shelter. Section 515 results in good community development. The concentration of people in rental units can mean less Federal, state and local tax dollars spent on street and road construction and maintenance, sewer and water construction as well as public school transportation, and less farm land being diverted to subdivision construction. Often, the location of a Section 515 project in a community has helped attract new industry by providing housing for potential employees. Money spent on Section 515 creates a community asset that lasts for many years as opposed to one shot assistance under most social service programs.

In FY85 FmHA assisted in the production of more than 90,000 units of rural housing which was responsible for the creation of more than 100,000 jobs. It is estimated that every FmHA financed unit creates 1.3 person-years of employment, meaning almost 470,000 person years of employment have resulted from the program. This further translates to billions of dollars in wages and tax revenues for local, state and Federal governments.

The Future of Rural Housing

In 1985 the Section 515 program was reduced from its previous years appropriation of $940 million and funded at only $900 million. In FY86, the program was cut to $700 million. We believe we have contributed to reducing the federal deficit and further reductions in funding would be grossly unfair.

The Adminstration has requested a deferral of $700 million in FY86 rural housing funds, $233 million of which would come from the Section 515 program. We commend you, Mr. Chairman, for your prompt action to disapprove this deferral by including language to that effect in H.R. 4515. We urge you to do everything in your power to ensure that this legislation moves swiftly through Congress with the disapproval language intact. Right now, FmHA has hundreds of Section 515 loan applications stalled because of this deferral request and several states are not able to obligate loan funds at all. Since the authority for the program expires on September 30 and the Administration has requested no funding for the program in FY87, we believe this action in fact consititutes a rescission rather than a deferral.

In addition, as you know, the Reagan Administration has once again proposed to eliminate all rural housing programs in FY87, and place responsibility for rural housing with the Department of Housing and Urban Development. CRHD opposes the Administration's proposals for several reasons.

1. Eliminating the direct federal lending provided by the Farmers Home Administration assures a dramatic reduction in housing production and job creation in rural areas. An estimated 230,000 units of housing need to be replaced each year in rural areas. The rural housing building industry relies heavily upon FmHA financing, and the elimination of this financing could decimate the already low housing stock. The lack of other available sources of credit means a serious downturn in construction trades in rural areas.

2. HUD is simply not organized to provide the kind of loan servicing of which FmHA is capable. Loan servicing would be transferred from the local county FmHA office to a HUD area office often located in a big city far away. A major reason for the great success of the Section 515 program and particularly its low default rate, is the close personal attention each project is given by local FmHA officials from the time a loan application is submitted to the time at which the project's doors are formally opened to tenants and then following the management of the project throughout its life. It is highly unlikely that HUD will be able to provide the same kind of committed assistance which rural America has enjoyed from FmHA.

3. The Administration does not propose to increase funding for new construction of low income housing but would provide 50,000 housing vouchers, 50% of which would go to rural areas and 50% to urban areas. The Section 515 program alone provided over 28,000 units of rural housing in FY85; the 25,000 units proposed by the Administration for all rural housing in FY86 is woefully insufficient and an insult to needy Americans. Furthermore, housing stock in rural America is so inadequate compared to urban areas, that it

could never support the voucher system as proposed by the Administration. Vouchers only work when there is an extant stock -- not the case in rural America.

Conclusion

Congress has supported the Section 515 program in the past and we urge you to do so again in FY87 at the FY86 level of $700 million. The program represents a highly successful public private partnership and should stand as a model for what can be done to benefit all Americans when the federal government provides the impetus for responsible private participation. Thank you. I would be happy to answer any questions.

TUESDAY, APRIL 15, 1986.

RURAL TELEPHONE PROGRAM

WITNESS

JOHN F. O'NEAL, GENERAL COUNSEL, NATIONAL RURAL TELECOM ASSOCIATION

Mrs. **SMITH.** John O'Neal with the Rural Telecom Association, welcome.

Your complete statement will be put in the record and you handle your presentation any way you wish.

Mr. **O'NEAL.** Thank you very much.

I am John F. O'Neal, General Counsel of the National Rural Telecom Association. Our association is comprised of commercial telephone companies who borrow their capital needs from the Rural Electrification Administration to extend and modernize telephone service in rural areas.

Approximately 1,034 or 71 percent of the nation's telephone companies borrow from REA. They serve almost 5 million subscribers in 46 states.

In accepting these loan funds, borrowers assume an obligation under the act to serve the widest practical number of rural users within their service territory.

Madam Chairman, continuation of a strong REA program is very important to rural America. It is imperative that this vital program not be jeopardized by philosophical opposition or by unrealistic assessments of program needs.

This committee and the Congress as a whole has strongly supported the REA telephone program since its inception in 1949.

We appreciate your past efforts and look forward to an even stronger REA program for the future.

Because of ongoing budget constraints, our association is recommending again this year that loan levels be frozen at last year's levels.

As in the past, we want to reiterate our willingness to accept reductions in program levels if the committee believes that is necessary to achieve its overall budget objectives.

However, we believe that reductions in the REA program should be generally proportionate to reductions in other Federal programs and not designed merely to accomplish ideological or philosophical goals as has been suggested by the Administration.

Proposals contained in the President's budget again this year would severely curtail and ultimately phase out the REA program.

Madam Chairman, there still have been no studies conducted which would support such radical proposals. No one knows for certain what the full impact or effects would be.

But one thing is certain: rural telephone rates would increase and service levels would deteriorate.

Included in my written testimony is a list of telephone loan applications by State which are currently on hand at REA.

As of April 1, 1986, exactly half way through this fiscal year, there was over $438 million in pending loan applications. Thirteen of these are from companies which have never borrowed from REA before.

I know the committee will agree that these figures, furnished by REA, amply demonstrate the ongoing need for this important program.

Critics of REA argue that the need for the program is over because borrowers have the ability to borrow from private sources.

But let us examine that. Private market lenders normally require 40 to 60 percent equities before they will extend credit.

Based upon the latest available REA statistics, the average telephone borrower at the end of 1984 had a net equity of only 28.5 percent.

Private lenders also require a one and one-half time interest coverage ratio test and prefer a ratio of two or higher. Most borrowers cannot meet the minimum test, much less the preferred one.

Also, it is important to note that most REA borrowers in relation to other telephone companies are very small and the territory they serve is extremely large but sparse.

They serve over one million square miles or 34.5 percent of the territory but less than five percent of the telephones.

REA borrower density is less than four access lines per square mile. The Bell System's is over 80.

Again this year, the President's budget contains no request for funding for the Rural Telephone Bank.

The purpose of the RTB is to provide a supplemental source of financing for REA telephone borrowers who can afford to pay higher rates of interest, thus relieving pressure on the insured loan program.

The bank is required under its enabling legislation to lend at its cost of money. That rate is currently 8.5 percent.

The RTB has proved to be a highly successful institution. Each annual increment of capital is vital to the full capitalization of the Bank, enabling more and more insured program borrowers to utilize bank financing.

Madam Chairman, the Rural Telephone Bank is the cornerstone of financing for REA telephone borrowers for the future and, hopefully, will be the institution which will ultimately provide all of the debt capital needs for rural telephone systems.

Fulfillment of the Bank's capital structure is a vital factor in this process.

Therefore, we respectfully request that the committee continue the appropriation of $30 million next year for government purchase of Class A stock in the Rural Telephone Bank.

Madam Chairman, again this year the REA program is facing great challenge. However, it withstands these annual assaults because it is a sound Federal program that is tried and tested—and it works.

It is needed today more than ever before. Rapid technological change and policies of competition and deregulation in the telephone industry underscore the need for targeted assistance to rural areas.

Rate pressures in rural areas are already burdensome with predictions that some rates will double or even triple in the foreseeable future.

Without the credit assistance provided by REA, even greater pressure would exist for rate increases.

In addition, many fail to recognize that without the REA program the quality of telephone service in rural areas also would deteriorate.

That is certain, because the REA Act imposes a higher standard of service on borrowers than would otherwise be required.

The REA Act requires that telephone service be provided to the "widest practicable number of rural users" in each borrower's service area—a mandate that REA strictly enforces.

For the second straight year, REA last year has failed to meet the minimum telephone loan levels established by this committee and the Congress even though there was a substantial backlog of applications at the agency—over $370 million at the end of the fiscal year.

However, because of the initiative of this committee and the action of Congress last year in prohibiting REA from relying on general funds restrictions to exclude or reduce borrower participation in the program that situation will likely not be repeated this year.

From all indications, REA is adhering not only to the letter but also to the spirit of Congress' directive in this regard.

Loan funds now are being disbursed routinely and the program is again functioning as intended by Congress. We urge the committee to extend the general funds prohibition in the Fiscal Year 1987 bill.

Otherwise, the effective operation of the REA telephone program will once again be seriously jeopardized.

Thank you again for the opportunity to present our views concerning this vital program which is as worthy and necessary today as it was when enacted in 1949.

Mrs. SMITH. Thank you, Mr. O'Neal, for coming, and we appreciate this testimony very, very much. It almost seemed as if you were talking about my Congressional District as you spoke about sparsely settled areas, served by small telephone companies.

I know first-hand how important the telephone bank is, and let me say that we are all very supportive of REA. I think no District understands better than mine what REA has done for us.

We have a telephone in our District more than 25 miles from the closest telephone, and all of this is extremely important. You know that we are under strict budget restrictions this year, but we are going to do our very best to maintain all of these important programs at a level that will not be damaging.

Mr. O'NEAL. Thank you very much.

[Mr. O'Neal's statement follows:]

STATEMENT PREPARED FOR PRESENTATION BEFORE THE AGRICULTURE, RURAL DEVELOPMENT AND RELATED AGENCIES SUBCOMMITTEE ON APPROPRIATIONS OF THE U.S. HOUSE OF REPRESENTATIVES

By John F. O'Neal
General Counsel
National Rural Telecom Association

April 15, 1986

Mr. Chairman, Members of the Committee:

My name is John F. O'Neal. I am General Counsel of the National Rural Telecom Association. Our association is comprised of commercial telephone companies who borrow their capital needs from the Rural Electrification Administration to extend and modernize telephone service in rural areas. Approximately 1,034 or 71% of the nation's telephone companies borrow from REA. They serve almost 5 million subscribers in 46 states. In accepting these loan funds, borrowers assume an obligation under the Act to serve the widest practical number of rural users within the service area.

Mr. Chairman, continuation of a strong REA program is very important to rural America. It is imperative that this vital program not be jeopardized by philosophical opposition or by unrealistic assessments of program needs. This Committee and the Congress as a whole has strongly supported the REA telephone program since its inception in 1949. We appreciate your past efforts and look forward to an even stronger REA program for the future.

Ongoing Need for the REA Telephone Loan Programs

Because of ongoing budget constraints, our association is recommending again this year that loan levels be frozen at last year's levels. These are the ranges your Committee approved for FY 1986:

REA Insured Loans	$250-325 million
REA Loan Guarantees	$185-220 million
Rural Telephone Bank Loans	$125-145 million

As in the past, we want to reiterate our willingness to accept reductions in program levels if the Committee believes that is necessary to achieve its overall budget objectives. However, we believe that reductions in the REA program should be generally proportionate to reductions in other federal programs and not designed merely to accomplish ideological or philosophical purposes as has been suggested by the Administration.

Administration's FY 1987 Proposals

Proposals contained in the President's budget again this year would severely curtail and ultimately phase out the REA program. For FY 1987, insured loan levels would be reduced to $60 million. No loans funds are requested under the guaranteed loan program despite the fact that such loans are made at more than the government's full cost of money and result in a profit for the government. Also, interest rates under all programs would be increased to the government's cost of money plus one and one-eighth percent resulting in a dramatic increase in the insured program. And finally, all REA lending programs would be phased out by FY 1990. If adopted, these proposals would result in a complete devastation of the REA program. Mr. Chairman, there still have been no studies conducted which would support such radical proposals. No one knows for certain what the full impact or effects would be. But, one thing is certain: rural telephone rates would increase further and service levels would surely deteriorate.

Below is a list of telephone loan applications by state currently on hand at REA. As of April 1, 1986, exactly half way through this fiscal year, there was over $438 million in pending loan applications. 13 of these are from companies which have never borrowed from REA before. I know the Committee will agree that these figures, furnished by REA, amply demonstrate the ongoing need for this important program.

TELEPHONE LOAN APPLICATIONS ON HAND AT REA
(4-1-86)

State/ Territory	No. of Apps.	$ Amount of Applications	No. Comp.	$ Amount of Compl. Apps.	No. of Un-com. Apps.	$ Amt. of Uncom. Apps.
Alabama	4	11,600,000	1	3,600,000	3	8,000,000
Alaska	3	5,200,581	-	---	3	5,200,581
Arizona	1	1,311,000	-	---	1	1,311,000
Arkansas	5	11,269,000	3	7,269,000	2	4,000,000
Georgia	1	15,303,000	1	15,303,000	-	---
Indiana	4	8,000,000	2	5,000,000	2	3,000,000
Iowa	14	8,820,500	1	582,000	13	8,238,500
Kansas	3	11,386,000	1	3,086,000	2	8,300,000
Kentucky	1	3,200,000	1	3,200,000	-	---
Louisiana	2	4,926,000	-	---	2	4,926,000
Maine	1	1,000,000	-	---	1	1,000,000
Michigan	4	35,621,600	1	1,230,000	3	34,391,600
Minnesota	9	21,430,000	2	5,919,000	7	15,511,000
Mississippi	4	10,000,000	1	3,500,000	3	6,500,000
Missouri	3	6,203,000	1	103,000	2	6,100,000
Montana	1	6,250,000	-	---	1	6,250,000
Nebraska	8	18,080,000	1	3,200,000	7	14,880,000
Nevada	1	20,000,000	-	---	1	20,000,000
New Hampshire	1	500,000	1	500,000	-	---
New Mexico	3	5,000,000	1	2,000,000	2	3,000,000
New York	5	8,872,400	3	5,622,400	2	3,250,000
North Carolina	6	42,487,005	1	4,000,000	5	38,487,005
North Dakota	2	7,500,000	-	---	2	7,500,000
Ohio	3	3,100,000	1	1,600,000	2	1,500,000
Oklahoma	4	8,742,000	3	4,742,000	1	4,000,000
Oregon	4	11,503,000	4	11,503,000	-	---
South Dakota	5	10,367,000	1	3,819,000	4	6,548,000
Tennessee	5	42,064,000	2	29,064,000	3	13,000,000
Texas	16	74,814,700	4	10,149,000	12	64,665,700
Utah	2	3,046,000	1	1,583,000	1	1,463,000
Washington	1	439,950	1	439,950	-	---
West Virginia	1	1,152,000	1	1,152,000	-	---
Wisconsin	2	2,020,000	-	---	2	2,020,000
Pacific Islands	3	17,650,000	-	---	3	17,650,000
TOTALS	132	438,858,736	40	128,166,350	92	310,692,386

Lack of Availability of Private Credit

Critics of REA argue that the need for the program is over because borrowers have the ability to borrow from private sources. But let us examine that. Private market lenders normally require 40 to 60 percent equities before they will extend credit. Based upon the latest available REA statistics, the average telephone borrower at the end of 1984 had a net equity of 28.5 percent. Private lenders also require a one and one-half times interest coverage ratio test and prefer a ratio of 2 or higher. Most borrowers cannot meet the minimum test much less the preferred one. Also it is important to note that most REA borrowers in relation to other telephone companies are very small and the territory they serve is extremely sparse. They serve 1,248,025 square miles or 34.5% of the territory but less than 5% of the telephones. REA borrower density is about 4 access lines per square mile. The Bell system's is over 80.

Rural Telephone Bank

In 1981, Congress authorized the additional government purchase of $300 million of Class A stock from the Rural Telephone Bank in the amount of $30 million per year for 10 years. Again this year, the President's budget contains no request for this funding. In addition, they are again seeking recision of last year's capitalization provided by the Congress.

Congress originally established the Rural Telephone Bank in 1971. Its purpose is to provide a supplemental source of financing for REA telephone borrowers who can afford to pay higher rates of interest, thus relieving the pressure on the insured loan pogram. The bank is required under its enabling legislation to lend at its cost of money.

It has proved to be a highly successful institution. Each annual increment of capital is vital to the full capitalization of the Bank, enabling more and more insured program borrowers to utilize bank financing fulfilling Congress' objectives. This Committee and the Congress as a whole has recognized the essential nature of this ongoing additional capitalization process by providing full funding for each of the first five fiscal years, 1982-1986.

The purpose for government purchase of Class A stock in the Bank is to attain a lending rate somewhere between the insured lending rate and the full cost of money rate. The infusion of the $30 million per year into the Bank permits the Bank effectively to achieve this rate, enabling more borrowers to be weaned away from the five percent statutory insured rate. The bank rate currently is 8.5 percent.

The Rural Telephone Bank is the cornerstone of financing for REA telephone borrowers for the future and hopefully, will be the institution which will ultimately provide all of the debt capital needs for rural telephone systems. Fullfillment of the Bank's capital structure is a vital factor in this process. Therefore, we respectfully request that the Committee continue the appropriation of $30 million next year for government purchase of Class A stock in the Rural Telephone Bank.

Conclusion

Mr. Chairman, the REA program continues to face its greatest challenges. However, it withstands these annual assaults because it is a sound federal program that has been tested and works. And, it is needed today more than ever before. Rapid technological change and policies of competition and deregulation in the telephone industry underscore the need for targeted assistance to rural areas. Rate pressures in rural areas are already burdensome with predications that some rates will double or even triple in the foreseeable future. Without the credit assistance provided by REA, even greater pressure would exist for rate increases.

Also, many fail to recognize that without the REA program the quality of telephone service in rural areas would also deteriorate. That is certain because the REA Act imposes a higher standard of service on borrowers than would otherwise be required. In the old days, if carriers provided service at all in rural areas it was only down the roads because service on any other basis was not feasible. Today, thanks to the Congress and the REA legislation, telephone service is provided to the "widest practicable number of rural users" in each borrower's service area -- a mandate that REA strictly enforces.

For the second straight year, REA last year has failed to meet the minimum telephone loan levels established by this Committee and the Congress even though there was a substantial backlog of completed applications at the agency -- over $370 million at the end of the fiscal year. However, because of the initiative of this Committee and the action of Congress last year in prohibiting REA from relying on general funds restrictions to exclude borrowers from the program (up to 77%) that situation will likely not be repeated this year. From all indications, REA is adhering not only to the letter but also to the spirit of Congress' directives in this regard. Loan funds are being disbursed now routinely and the program is again functioning as intended by Congress. We hope and recommend that the Committee extend the general funds prohibition in the FY 1987 bill. Otherwise, the effective operation of the REA telephone program will once again be jeopardized.

Thank you again for the opportunity to present our views concerning this vital program which is as worthy and necessary today as it was when enacted in 1949.

Tuesday, April 15, 1986.

RURAL ELECTRIC PROGRAM

WITNESSES

BOB BERGLAND, EXECUTIVE VICE PRESIDENT, NATIONAL RURAL ELECTRIC COOPERATIVE ASSOCIATION

W. T. (TOM) SHOWS, VICE CHAIRMAN, NRECA LEGISLATIVE STANDING COMMITTEE

ERNEST HOWE, SECRETARY, NRECA LEGISLATIVE STANDING COMMITTEE

HARRY K. BOWMAN, GENERAL MANAGER, NORTHERN VIRGINIA ELECTRIC COOPERATIVE

Mrs. **Smith.** Mr. Bergland, my former colleague, and I belie you have Mr. Howe and Mr. Bowman with you?

Mr. **Bergland.** Yes.

Mrs. **Smith.** They are all welcome to come up to the table. Welcome back, our former Secretary of Agriculture, glad to have you here.

Mr. **Bergland.** Thank you very much, Mrs. Smith.

Mrs. **Smith.** You are wearing another important hat today.

Mr. **Bergland.** Thank you very much. I am indeed pleased to introduce some associates, Mr. Ernie Howe from Indiana, associated with the Statewide Electric Cooperative Group in that great State; Mr. Tom Shows, at the other end of the panel, is a Manager of a Cooperative in Pearl River, Mississippi; and Mr. Harry Bowman is manager of a cooperative here in rural Virginia.

These gentlemen manage cooperatives that have, as part of their service area a very low density factors in some parts get in their city, where the population is more compact, they are here because recently, there has been a problem regarding the question of whether these cooperatives that are serving areas that are more dense than other areas should be entitled to REA lending, and Mrs. Smith, we have a very detailed statement we would like to have included in the record.

Mrs. **Smith.** All of your statements will be included in the record.

Mr. **Bergland.** If it is all right, we would like to give you a brief summary of the problem.

Mrs. **Smith.** Proceed as you wish.

Mr. **Bergland.** We have about 1,000 electric cooperative in 46 States, serving about 9 million families and, as is the case with the telephone companies, we are obliged to serve all comers, whether they live nearby or far away.

We charge everyone the State rate. We don't give discounts to rich people, don't give discounts to people who might be in more densely settled areas.

While those are more profitable, cooperative, of course, runs at cost, and our objective is to provide service at the lowest cost, and so, we have to take account of the structure of the entire cooperative financial picture, and in every cooperative has a reason, where in some cases they live in faraway places, and some reasons they live more closely together.

This is the nature of the rural community. The Administrator of the agency, Mr. Harold Hunter, recently sent a letter to some Members of Congress that what we charge is misleading in that in the letter, he attached a map in which he suggested that REA monies are going to densely-settled regions of the United States, and the real fact of the matter is that the REA lends money to a cooperative, and it is true that most of them will have places in that cooperative that are more dense and place that are more sparse.

The cooperative cannot make a distinction between a family who lives in a dense situation, and a family who lives in a sparse area. We charge everybody the same rate. So, the fact is that these cooperatives are eligible to borrow, because they are obliged to take on all comers, and provide competitive rates, and therein lies the problem.

Our rates, generally speaking, are not competitive. We have the investor-owned utility serving the areas adjacent to the cooperatives in 75 percent of the instances in the United States, the exceptions to that general rule are either in the Pacific Northwest, with a rather unusual power supply circumstance or in some instances in the TVA.

Outside of that, those two areas, the cooperative unfortunately do have to charge more than the utility serving electric consumers in cities. This is natural.

We will all be more expensive, because we have only have consumer per mile, and city utilities have about 40. We have risk of storm damage, that tears the lines down, there is no insurance it has to be rebuilt by consumer member owners and REA is to help them provide financial to rebuild the lines and maintain the high quality service for which the cooperatives are famous.

So, we stoutly disagree with the Administration's suggestion that a cooperative out to use some other source of funding for any work that is done in a community that has a population that lives more closely together.

There is no way that we can make such a distinction or segregation, it is never done in other programs. For example, municipal or city-owned utility system within these enterprises with tax-free bonds.

There is no distinction between a rich city and poor city. There is no means test in this bonding. It is everyone who cares to submit a bond to the marketplace is tested by that market.

In fact, the irony is a rich city with a better credit rating has a better discount in the bond market than a city who is in some financial trouble.

Those consumers unfortunately have to have a higher price. Industrial owned utilities have certain advantages in the tax law, we are not quarreling with what happens, but there is no means test applied to, and investor-owned utility that takes advantage of the investment credit and accelerated depreciation discounts and in addition, they are allowed to do so under the law; we have no argument here.

The fact is, however, that the Internal Revenue Service does not make a decision on the basis of whether that cooperative, that utility serves densely-settled areas or sparsely-settled areas, and so, we wanted to point this out to the committee so that the Administration letter does not go unchallenged, because we believe that it can be terribly misleading to the person who does not look into the facts more closely.

And I know this committee will examine the facts very carefully, as you have always done.

We would like to comment on levels of funding for the REA for next year. I have attached to my statement a chart, which shows the steady decline in REA funding since 1981. It was $5.8 billion. It has declined each year. Last year, it was down to $637 million, and Mrs. Smith, we have reached the bottom of the barrel.

We are as far down as we can go. Last year, during the course of the discussion with the Budget Committees of the House and Senate, we agreed to a substantially reduced funding level for REA electric cooperatives.

We found that a little hard to take, but we are willing to do this. Congress is struggling with the budget questions, and so we said we would accept a sharply reduced level, and the agreement was reached between the electric cooperatives, and the Congress of the United States on that reduced level, and we further agreed that we would take our share of any cut which may come as a consequence of Gramm-Rudman-Hollings law.

We stand by that agreement. If the Gramm-Rudman-Hollings law last year reduced proposals levels by 4.3 percent, we accept that. We will take our share along with everyone else's.

The Administration proposes to sharply reduce REA lending for the next year, in effect breaking the agreement we reached last year, which was for three years.

We are prepared to stand by that last year's agreement, live with the sharply reduced lending levels. Some day, we hope the Nation's budget questions can be settled, and then we can get into other matters of expansion, but for the moment, we will accept these low numbers, but we will not accept elimination of the agency and sharply reduced support for these cooperatives that are having a hard go to provide electric service at competitive rates.

And Mrs. Smith, I would like now to yield to my colleague, Mr. Bowman, who would like to describe briefly the circumstances here in Northern Virginia, and then on to Mr. Shows from Mississippi.

Mr. BOWMAN. Thank you, Mrs. Smith. I am General Manager of a Northern Virginia electric cooperative. I have a prepared statement, but I would like for the sake of time just to highlight a few examples.

Northern Virginia Electric Cooperative is often referred to by REA as the type of cooperative that should not be eligible for REA loans, and I just would like to give you some facts of the thing that exists.

We do serve some very populated areas in the areas of Manassas and Centreville and Dale City. We also serve some very sparse areas. Even with these highly populated areas, we have an average density of 14.7 consumers per mile.

Our neighbor, Virginia Power, has over 29 consumers per mile. Both of those are greatly less than the national investor-owned average of about 37, and municipalities with their 60 per mile.

Because of this, our revenue is much less. In our case, our annual revenue per mile is $20,414, our neighbor Virginia Power has revenue of $94,174 per year.

Unfortunately, we also have higher rates because of this lesser amount of revenue. Our rates are, this April, are from $75.62 for every thousand kilowatt hours, against $70.74 for our neighbor Virginia Power.

Despite our higher rates, we have less equity. 20 compared to 38.6 for our neighbor, the investor-owned Virginia Power.

We serve primarily residential consumers. Last year, our service was 70 percent residential, as against our neighbor, who is 38 percent residential.

We are a large cooperative. We are not an average, but I think we represent things that are happening to a lot of cooperatives with pockets of dense areas being formed.

Let's look at Federal assistance. As you know, all segments of the electric utility industry receives some Federal assistance.

The municipalities receive assistance through the authority to sell tax-exempt bonds. Virginia Power has assistance through the investment tax credits, and accelerated depreciation.

Northern Virginia received some assistance through 5 percent loans from the Rural Electrification Administration. When you look at this assistance, our neighbors, Virginia Power, receive assistance of around $50 for each consumer they serve.

We receive about $35 through the 5-percent loans. When you look at the cost of money of about 8.5 percent at this time. It seems unfair to me, for the Administration to oppose the elimination of REAs, while at the same time, the Federal Government is retaining the substantial subsidies for the investor-owned and municipalities.

I appreciate the opportunity to be here, and I would be glad to respond to any questions you might have.

Mrs. SMITH. Thank you.

Mr. SHOWS. I am General Manager of a rural electric company at Columbia, Mississippi, located in the southern part of Mississippi. It can be really classified as a real rural electric, because we serve a very rural area in a very rural State.

When you compare our density, which is 5.2, compared very favorably with the national average, the density of the commercial investor-owned power company that serves around us, is almost 40.

Then, when you look at revenue per mile, ours comes out about $5800, and theirs about $90,000 per mile of line.

So you can see the difference. Then our rates are much different. For 1,000 kilowatt-hours, our charge is $76.30 because we have to serve everyone that comes out in our area.

Their rates for 1,000 kilowatt hours are $61.07, or a difference of about 25 percent.

Yet, we don't have much flak from our consumers, because we do the job of giving the good service, providing courteous, dependable service at all times.

Our comparison is very similar to Mr. Bowman's. Mr. Bergland has pointed out to when you look at investment tax credit, that the investors-owned take advantage of and accelerate depreciation, the gap of yours is much greater.

We figure annually, that the Mississippi Power Company advantage per consumer is $73 annually for their consumers, because of these breaks that they can take.

When you look at the difference that we pay for money and what it is costing the government, it comes out to $19.19.

Mrs. Smith, I hope this information is of value to you, and we certainly appreciate you letting us come and appear before you.

Mrs. **Smith**. We appreciate you being here.

Let me thank all of you, and let me say how sorry I am that our Chairman, Mr. Whitten, isn't here. I don't know if you were here when I said he is in New York right now attending Mr. Addabbo's funeral services, as are some of our other members, so, we are sorry that they didn't all get to be here.

I have been taking notes on things you have said. I thought, Bob, that would be great to know when I speak before REA cooperative meetings out in my District, which I do a great deal.

Let me say this entire Committee is very, very supportive of REA, I have always said I thought it was the greatest thing to happen to agriculture, out in my sparsely settled part of the country, and the greatest thing everywhere.

I was so glad that you addressed the issue that some folks don't put it like you do, they say, why should the REA program finance urban sprawl. We have some feelings here in the Congress that it should be held to rural areas.

You folks did a lot of explaining about how difficult this would be, and I am glad that I now have had your testimony, and I am familiar with the letter that you speak of.

We certainly do want to look at it very thoroughly, and from all angles, and let me say that our Committee will be doing the very best that we possibly can for REA, because we don't operate as Republicans and Democrats here; we are for rural America and we know how devastating the situation is out there, and we are going to try to help all that we possibly can.

Mr. **Bergland**. Thank you.

[The statements of Messrs. Bergland, Shows, and Bowman follow:]

STATEMENT OF BOB BERGLAND, EXECUTIVE VICE PRESIDENT
NATIONAL RURAL ELECTRIC COOPERATIVE ASSOCIATION

before the
Subcommittee on Agriculture, Rural Development
and Related Agencies
Committee on Appropriations
U. S. House of Representatives
April 15, 1986

Mr. Chairman and members of the Subcommittee. . .

It's my pleasure to appear before you today on behalf of the more than 25-million Americans in 46 states who depend on NRECA member systems to supply dependable and affordable electric energy for their homes, farms and businesses. The leadership of the nation's 1,000 consumer-owned rural electric systems deeply appreciate the ongoing interest and unwavering support which our program has received from members of this Subcommittee, along with a majority of your colleagues in the House and Senate.

We like to think that we have earned that support by what we have been able to accomplish -- with your help -- over the 51 year history of the rural electrification program. We're proud of what the rural electrification program, working in partnership with the federal government, has done to change the face of rural America. We're proud of what we're doing today to ensure that reliable electric service will continue to be available to all who wish to have it in the areas we serve. We're proud of what we're doing to keep costs down and rates as affordable as possible given the nature of the areas we serve. And we're especially proud of the work being done by rural electric systems in many parts of the country to improve the quality of life for their members, including active support for jobs creation and economic development efforts.

We hope that the members of this subcommittee and others in Congress who have supported the rural electrification program over the years share in this pride. You certainly have every right to do so.

Mr. Chairman, for the fifth time in as many years we are coming before you not only to discuss NRECA's recommendations for REA lending levels in the next fiscal year, but also to respond to the latest series of charges and criticisms put forth by the present Administration to justify their proposals to dismantle the program.

Many of the arguments put forth in this latest round -- for example, that the job of REA is over since almost all of the nation's farms now have access to central station electricity -- have been raised, refuted and rejected time and again. I'll not waste the subcommittee's valuable time plowing that ground again.

There are a number of allegations, however, particularly those stemming from a so-called "study" which Administrator Hunter provided to this subcommittee several weeks ago, which demand our response. This is particularly so in view of the fact that the Administrator has seen fit to distribute this material, accompanied by a letter which we consider both inflamatory and misleading, to every member of the Congress.

In general, we feel the REA study intended to support these proposed cuts and changes in the loan program is seriously flawed in several fundamental ways.

* We do not believe that an individual borrower can be fairly or accurately characterized by examining only individual construction projects, rather than looking at the density of the entire system. To extend this reasoning to entire states, as has been done in the REA study, borders on the ridiculous.

One need look no further than the fact that the REA study "proves" that states such as Idaho, Utah and Texas are "high density" to see that something is seriously wrong here.

* We also take major exception to the methodology used in REA's analysis, under which the entire amount of a loan is treated as though it was used for new service extension when, in many cases, substantial portions of these funds are used for system improvements and upgrading of existing lines and equipment located in very low density areas of the system.

* Finally, we note that the Administration steadfastly refuses to give any consideration to the fact that reducing or eliminating the assistance provided through REA -- without making corresponding adjustments in the subsidies provided to private and municipal utilities through tax policy -- will serve only to worsen the rate disadvantage under which 75% of REA borrowers already operate.

Let me address some of these items in greater detail:

In his letter of March 27th, Administrator Hunter expressed alarm over "serious inequities" in REA's lending procedures and then went on to make the categorical statement that ". . .80 percent of the agency's subsidized loans are not helping rural areas. . ." The basis for this is an REA study, dated March 14 and replete with maps, tables and graphs, which would have us believe that if any portion of the area served by an REA borrower has a consumer density greater than five per mile, the entire borrower has somehow lost its right to be considered "rural." We strongly disagree with both the logic and the facts behind this notion.

First of all, we believe the only reasonable way to look at a rural electric system is in its entirety. Each member-owner of a system shares equally in the responsibility to repay loans to REA and other lenders. Every member pays the same rate for power, regardless of how close or far their neighbors may be.

The cornerstone of area coverage, the concept that has made it possible to provide service to some pretty far-flung places in rural America, is that you test the feasibility of serving a new consumer on how that service extension will affect the condition of the system as a whole.

In many cases, providing service to remote and sparsely populated areas could never have been justified were it not for this "all together" approach to determining feasibility.

We believe that the concept of area coverage is just as relevant when applied to the service extensions in areas Mr. Hunter characterizes as "high" and "medium" density. (It should be noted how Mr. Hunter's definition of "high" density as more than 10 consumers per mile compares with the investor owned utility's average density of 36 per mile, and the municipal utility average of 60 per mile.)

The question should not be how many consumers per mile will be served by a particular extension, but rather how will this new service effect the financial and operational condition of the system as a whole.

Consumer-owners in the past were willing to sacrifice some of the financial strength of their systems in order to extend service to remote areas. Should these systems now be denied a chance to gain back some small measure of that strength by imposing higher financing costs for extending service in areas which, over time, have become somewhat less rural? We believe that this would be both unwise and unfair. If it makes the entire system stronger, every loan REA makes benefits not only new consumers but old ones as well. On this basis we believe there is no support whatsoever for Mr. Hunter's allegation that REA loans are not helping rural areas.

In his testimony before this subcommittee last month, Administrator Hunter also expressed support for a number of specific proposals to increase financing costs and impose other new charges on REA borrowers.

For several years NRECA has maintained what we believe is an open-mind and constructive attitude regarding possible changes in the terms of REA lending. In the 98th Congress we gave our enthusiastic support to proposed legislation, H.R. 3050 and S. 1300, which would have increased the basic interest rate on REA insured loans.

In return for accepting higher financing costs on our members, we have asked only (1) that the rate be reasonably related to the cost of funds to REA and (2) that steps be taken to ensure the long-term availability of REA as a primary capital source for rural electric systems. We believe that the Administration's current proposal for changes in loan terms fall far short on both counts.

Raising the REA insured rate to the Treasury's cost of money plus 1.125 percent would result in a new REA rate (based on 30 year Treasury obligations as of April 4, 1986) of 8.6 percent -- an increase of more than 70% from the current five percent rate. Add to this the effect of the 5% upfront usor fee REA proposes to charge on new insured loans, and the effective interest rate becomes 9.1 percent. Over and above this would be the effect of the Administration's proposal to charge rural electric borrowers some $183-million in FY 1987 through a "fee for losses." The imposition of a fee of this magni- tude could result in such large increases in the effective rate on REA loans as to mean the virtual termination of the lending program.

We further take strong exception to the efforts the Administration has made to justify these added costs by pointing to the fact that many rural electric systems have been successful in improving their financial profile in recent years and therefore should be able to absorb this increase in costs "without further adversely effecting the economics of the agricultural community."

Much of this "improvement" has come as a result of past rate increases put into effect at the encouragement and, sometimes, the insistence of REA and other lenders, concerned that borrowers maintain certain financial ratios and equity levels. The downside of this trend, which the Administration has consistently failed to address, is that it has worsened the already severe rate disparity that exists between rural electrics and their neighboring investor owned utilities.

In considering the question of rate comparability, it's also important to recognize that subsidies in one form or another are being provided to each of the three major segments of the electric utility industry. Given the spate of recent articles in the business and trade press regarding the relative prosperity of many investor owned utilities, it would seem reasonable to expect that they also would be called on to do their part by accepting reduced assistance. It is unlikely that the tax subsidies now enjoyed by private power companies will be eliminated or that the assistance provided to publicly owned systems through tax exempt financing will be reduced.

We strongly believe that rate comparability on a regional or neighboring system basis must be a major consideration in any evaluation of the relative subsidy provided to various segments of the utility industry. This is particularly critical in view of the pressing need we see for an expansion of the economic base of rural America to compensate for the depressed condition of the agricultural sector.

While Mr. Hunter says don't worry about the extra 65 cents per month that the Administration's proposals would (according to their analysis) cost the average rural electric consumer, we do worry -- about how an extra $1,000, $5,000 or $10,000 a month in power costs might affect the willingness of new industries to locate in rural areas or how these costs will add to the financial burdens of the already devastated farm sector.

The last specific point on the Administration's wish list which I feel compelled to address is the proposal to which I referred earlier, that would impose an annual fee on REA borrowers "to cover principal and interest losses that have resulted from non-payments of borrowers."

Mr. Chairman, NRECA and its members are painfully aware of the problems being experienced by several of our power supply systems. Less than anticipated demand for power and plant cancellations have created a crisis which has cast a long and deep shadow of uncertainty over much of the program. We're doing everything humanly possible to find equitable solutions to these problems and will continue to do so.

We feel strongly, however, that any proposal which would place the entire burden of these problems on the shoulders of REA borrowers alone is unreasonable, unfair and directly contrary to the clear intent of Congress when the 1973 amendments to the Rural Electrification Act created the guarantee program. We believe that the imposition of the type of assessment being proposed by the Administration which would result in exhorbitant charges to borrowers, goes against both the letter and spirit of the law.

SPECIFIC PROPOSALS FOR FISCAL YEAR 1987

As you may recall, Mr. Chairman, last year at this time we presented recommendations for REA lending levels that represented a more than 20 percent reduction over the prior year. At that time, we expressed the view that the observed fall off in demand for REA loans was attributable to the depressed economic conditions in the agricultural sector specifically and throughout rural America in general.

We also discussed the increasing reliance by rural electric systems on internally generated funds as opposed to capital borrowed from REA or elsewhere. Co-ops were reinvesting these funds in their systems rather than reducing rates or returning them as capital credits, largely because of continuing uncertainty and concern about the future of the REA program.

I wish I could report today that this situation has significantly changed. I wish I could say that the economic recovery, reduced inflation and lower interest rates which have come about in recent years have improved the fortunes of agriculture and rural America. I wish I could report that the leaders of rural electric systems feel renewed confidence in the future of REA as a dependable and constructive partner in our continuing effort to provide electric energy and other vital services to the people of rural America.

Unfortunately, I cannot make such a report. Demand for loan funds is still down and remains very much uncertain. Confidence in the future of our relationship with REA is still low, as a result of the Administration's persistence in planning its demise. And if anything, the farm crisis in many areas has become only deeper and more filled with despair.

On this basis, we believe the best course of action would be to maintain the existing (FY 1986) electric program levels for REA insured and guaranteed loans, as adjusted earlier this year under the provisions of the Gramm-Rudman-Hollings Deficit Reduction Act.

Specifically, this would establish a floor of $622-million and a ceiling of $933-million for insured loans, and a floor of $813-million and a ceiling of $1,961-million for loan guarantees in the year beginning October 1, 1986. Rural electric systems have already accepted substantial reductions in loan levels. During the period FY 1981-1985, REA loans and guarantees have dropped by 89.2% -- from $5.8 billion in 1981 to $636 million in 1985.

We strongly oppose, Mr. Chairman, the proposal to reduce appropriated funds for REA administrative expense in anticipation of the loan origination fee suggested in the Administration budget. We recommend also that Congress reject the Adminstration's propposed rescission of $100-million in fiscal 1986 appropriations for the Rural Electric and Telephone Revolving Fund.

We urge -- and have based our recommendations upon -- maintenence of the current ratios and criteria applied to supplemental loan requirements for insured lending, and strongly oppose any plan to arbitrarily limit the application of the REA guarantee to some fraction of the borrower's captial need.

Finally, we continue to strongly oppose the elimination of any major services now provided by REA, such as those provided by its Engineering Standards Division. We will not support any reorganization plan at USDA which would reduce the effectiveness of REA or remove from the agency its key administrative functions in such areas as personnel and budget.

Before closing, Mr. Chairman, I would take just one additional moment to reaffirm NRECA's continuing strong support for an aggressive and effective federal program for rural area development, including the housing and other rural services programs administered by the Farmers Home Administration. Given the continuing economic crisis in the agricultural sector, we feel these programs are more important now than ever before, and should be funded at levels commensurate with need.

Thank you again, Mr. Chairman, for this opportunity to present our views to the Subcommittee. I will be delighted to respond to any questions you may have now or at any time in the future.

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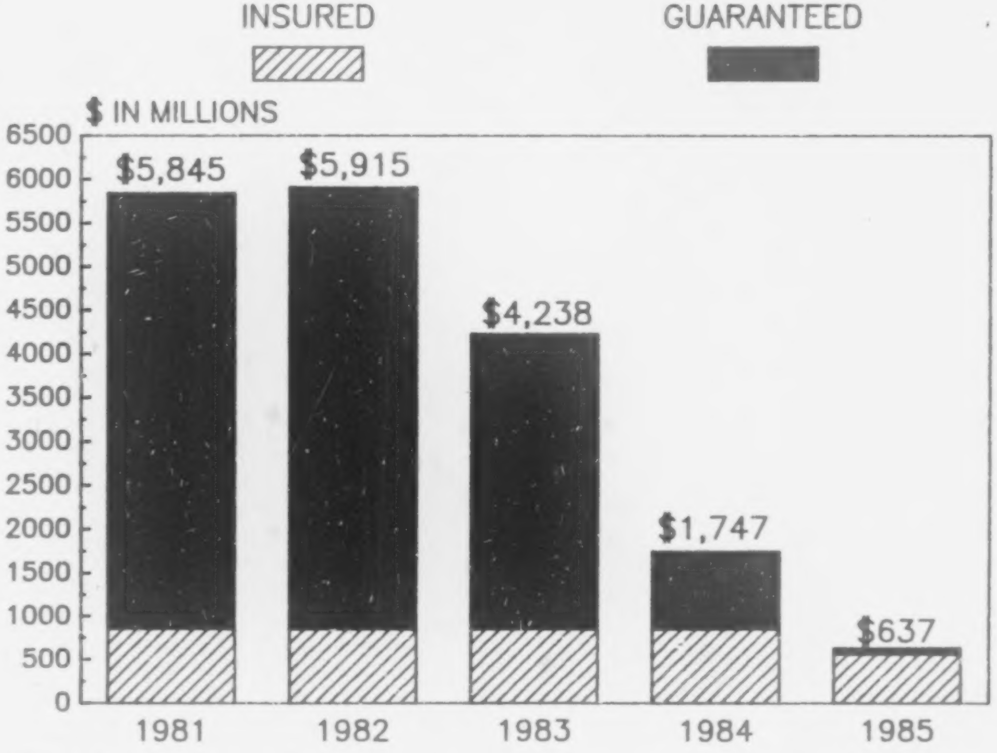
REA LOANS & GUARANTEES APPROVED



NOTE: Includes Electric Program Only

STATEMENT OF MR. HARRY K. BOWMAN, GENERAL MANAGER
NORTHERN VIRGINIA ELECTRIC COOPERATIVE
MANASSAS, VIRGINIA
before the
Subcommittee on Agriculture, Rural Development
and Related Agencies
Committee on Appropriations
U.S. House of Representatives
April 15, 1986

My name is Harry Bowman. I am General Manager of the Northern Virginia Electric Cooperative (NVEC) which is headquartered in Manassas, Virginia.

Our cooperative provides electric service to approximately 43 thousand consumers located in portions of several Northern Virginia counties. I am pleased to have this opportunity to discuss our cooperative because it is often referred to by REA Administrator Harold Hunter and the REA lobbyists as an example of the type of cooperative that should NOT be eligible for REA loans.

I think a few comparisons between NVEC and our investor-owned neighbor, Virginia Power Company will be helpful to the committee.

1. Despite the fact that Northern Virginia Electric Cooperative serves a more densely populated area that the vast majority of rural electric systems, its density is only half that of Virginia Power Company -- 14.7 as compared to 29.7 consumers per mile of line. Our 1984 revenue per mile was $20,414 compared to $49,174 for Virginia Power Company.

2. Unfortunately, our cooperative has higher rates than Virginia Power Company. As of April, 1986, our residential consumers pay $75.62 per month for 1000 KWH compared to $70.47 for a Virginia Power consumer.

3. Despite our higher rates, Virginia Power Company has a significantly higher equity ratio. Our cooperative closed 1984 with an equity ratio of 20.7 percent compared to 38.6 percent for Virginia Power.

4. Northern Virginia Electric Cooperative serves primarily residential consumers, whereas Virginia Power Company, like most investor-owned utilities serves mainly commercial and industrial load. For example, during 1984, 70% of the kwh sold by our cooperative went to residential consumers, compared to only 38% for Virginia Power.

5. Our cooperative is among the largest rural electric systems in the country. During 1984 we served 43 thousand consumers compared to the median co-op which served only about 7 thousand. However, compared to an investor-owned utility, our cooperative is relatively small. Our 43 thousand consumers compare to the 1.5 million served by Virginia Power. Our cooperative collects annual revenues of about $60 million; Virginia Power collects about $2.5 billion each year. During 1984 our cooperative sold about 812 thousand mwh; Virginia Power sold 41,800,000 mwh.

6. Let's compare Federal assistance for a minute. As you know, all segments of the electric utility industry receive subsidies from the Federal Government. Municipal and other publicly-owned utilities receive assistance through authority to sell tax-exempt bonds.

   Virginia Power Company, like other investor-owned utilities, receives government assistance through tax breaks -- primarily investment tax credits and accelerated depreciation. These provide the utility the equivalent of an interest-free loan. As of the end of 1984, the amount of accumulated investment tax credits and deferred taxes held by Virginia Power totalled $885.7 million.

   Northern Virginia Electric Co-op receives assistance through 5% loans from the Rural Electrification Administration. As of the end of 1984 REA loans outstanding to this cooperative totalled $41.2 million. The cost of the assistance provided to Virginia Power exceeds that of our cooperative, both in total dollars and on a per consumer basis.

   If we assume an 8.5% current cost of money to the Government, the $885.7 million of deferred taxes held by Virginia Power costs the Government $75.3 million annually, or $50.20 for each of Virginia Power's 1.5 million consumers.

   Our cooperative's $41.2 million in REA loans also costs the Government something -- the difference between the REA interest rate of 5% and the Government's cost of money now about 8.5%. That difference results in a cost of about $1.4 million or $35.20 for each of our cooperative's 41 thousand consumers -- 30% less assistance per consumer than is being received by Virginia Power Company, despite our higher retail rates.

   It seems terribly unfair to me for the Administration to propose the elimination of REA while at the same time retaining substantial subsidies for investor-owned and municipal utilities.

Mr. Chairman and members of the Committee I appreciate the opportunity to discuss my cooperative with you this afternoon. I hope some of the facts which I have conveyed will help to dispel the deliberate misrepresentations that have been circulated concerning the rural electric program.

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STATEMENT OF MR. W. T. (TOM) SHOWS, VICE CHAIRMAN
LEGISLATIVE STANDING COMMITTEE
NATIONAL RURAL ELECTRIC COOPERATIVE ASSOCIATION
before the
Subcommittee on Agriculture, Rural Development
and Related Agencies
Committee on Appropriations
U.S. House of Representatives
April 15, 1986

My name is Tom Shows. I am the General Manager of Pearl River Valley Electric Power Association which is headquartered in Columbia, Mississippi.

Pearl River provides electricity to about 22,500 consumers located in several southeastern Mississippi counties. REA Administrator Harold Hunter has recently distributed a study to all members of Congress in which he portrayed the rural electric program in Mississippi as "high density." In fact, the Mississippi co-ops serve only 6.2 consumers per mile of line compared to a U.S. average of 37 for investor-owned utilities and 60 for municipals.

I would like to present a few comparisons between my cooperative and Mississippi Power Company, our investor-owned neighbor.

1. Pearl River Valley Electric Power Association serves 5.2 consumers per mile -- identical to the U.S. average for all rural electric systems. Mississippi Power Company serves 36.1 consumers per mile -- very close to the U.S. average of 37 per mile for all investor-owned utilities. Our cooperative had 1984 revenue per mile of $5,285 compared to $90,620 for Mississippi Power Company.

2. As you might expect Mississippi Power Company has significantly lower rates than Pearl River Valley EPA: $76.30 as compared to $61.07 at 1000 kwh residential, as of April, 1986 -- a difference of 25%.

3. Both Pearl River Valley EPA and Mississippi Power Company receive Federal assistance. For Mississippi Power Company this comes in the form of tax breaks. As of the end of 1984 Mississippi Power's books showed accumulated investment tax credits and accelerated depreciation of $145.2 million. These provide the utility the equivalent of a zero interest loan -- a fact that is readily acknowledged by the Edison Electric Institute. If we assume that the Government's cost of money is currently somewhere around 8.5%, this $145.2 million of interest free money costs the Federal Government $12.3 million annually or $73.67 for each of Mississippi Power's consumers.

   Now let's compare the assistance provided to Pearl River Valley EPA. As of the end of 1984 our cooperative had $12.3 million of REA loans outstanding, mostly at a 5% interest rate. The cost to the Government of these loans is the difference between its cost (now about 8.5%) and the interest paid (5%).

> This difference amounts to $430 thousand per year or $19.19 for each of our consumers -- much less than the $73.67 per consumer being received by Mississippi Power Company.

Mr. Chairman and members of the Committee I hope the information I have shared with you this afternoon will shed some light on the misinformation that is being circulated by REA Administrator Harold Hunter and his lobbyists.

I appreciate the opportunity to discuss these matters with you this morning.

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TUESDAY, APRIL 15, 1986.

RURAL TELEPHONE PROGRAM

WITNESS

WILLIAM MAGRUDER, MANAGER, DUO COUNTY TELEPHONE COOPERATIVE CORPORATION, JAMESTOWN, KENTUCKY

Mrs. SMITH. Mr. Magruder? Your entire statement will be in the record, and you may summarize or proceed as you wish.

Mr. MAGRUDER. Thank you, Madam Chairman, and members of the subcommittee, good morning. My name is William Magruder, and I am the General Manager of Duo County Telephone Cooperative Corporation in Jamestown, Kentucky.

Today, I also represent the National Telephone Cooperative Association, or NTCA. NTCA is a national trade association representing over 450 small, rural telephone systems in more than 40 States.

Duo County Telephone Cooperative serves about 7,400 subscribers in rural south-central Kentucky. It was established in 1954, largely because the availability of REA financing, which made it possible to build a telephone system linking the small towns in the area which had minimal telephone service, with the countryside, which had none at all.

I want to thank this subcommittee for its strong support of the REA program in the past. REA made it possible for areas like ours to have telephone service in the first place, and without REA, we would not have been able to complete important projects, such as connecting our party line customers to single party service, a project we just finished in December of last year.

In our part of the world, we know what REA does, and we are grateful to you who make it possible.

As a representative of my cooperative and a member of NTCA, I cannot support the President's fiscal year 1987 proposals for the Rural Electric Administration. I urge this subcommittee to reject these unfair proposals. The large cuts in fiscal year 1987, the phaseout by 1990, the new fees and the sale of assets would add to growing problems with rural telephony and could make rural telephone service unaffordable.

The benefits of the REA program accrue to rural consumers, not to telephone systems. The farm economy in Kentucky, as in other areas, is in trouble. This is no time to place higher costs on our farm families.

The REA staff has recently testified that REA telephone borrowers have done so well in the past that they will not need the REA loan program in the future. I wish that were true.

When you compare total operating revenues of the REA borrowers with those of the larger non-Bell local telephone companies, you see that we have not been able to keep up with the others.

REA borrowers' total operating revenues increased by 66 percent from 1980 to 1984; larger independents' total operating revenues increased by 288 percent. Furthermore, the future looks quite different from the past for rural companies.

The Federal Communications Commission and State regulations are dramatically changing the existing regulatory framework which will reduce the support that long distance service provides to the local telephone company.

REA borrowers on average rely on long distance service for 66 percent of their total operating revenues. Many will be significantly affected by these regulatory changes.

REA staff has also claimed that REA borrowers have become increasingly urbanized. The facts, however, are that telephone borrowers have an average density of 5.5 customers per mile of telephone line. My company's density is 6.5. This is a low density by anyone's standards.

REA staff claims that REA cannot target its loan funds. This is misleading, since Congress required REA to give first preference to the use of the higher-interest Rural Telephone Bank monies when it makes loans to systems with more than three consumers per mile.

As a result, more than half of REA telephone borrowers have obtained some or all of their loan funds from the bank. My company's last loan was a concurrent loan from both REA and the RTB. The composite interest rate on our concurrent loan is 7.5 percent.

We disagree with the contention that REA is no longer needed and that the borrowers can afford alternative financing. Borrower net worth, at 28.5 percent, is still far below the level that the private financing market seeks in telcos. Moreover, most of us could not afford the higher cost of those sources without significant rate increases.

I would now like to comment on two REA policies about which this subcommittee has shown concern during the past year. One concerns the Engineering and Standards Division of REA.

Despite strong report language in the appropriations bill, REA has not yet filled the vacant positions in this Division.

As you know, it is estimated that the Division saves $133 million during rural telephone and electric construction projects. Two additional engineers have left the Division, and REA has taken no steps to replace most of the staff.

They have not even tried to recruit temporary or part-time staff. We hope that the subcommittee will maintain its interest in this issue, as we believe that the added pressure from Congress gets the best results possible from the Administration.

Finally, the elimination of the unfair general funds policy has made it possible for many telcos to proceed with much-needed, but delayed projects. REA reports an increase in loan applications, which is ascribes to the general funds policy change.

We believe that the subcommittee action in asserting Congressional authority in this area has had a very positive effect on the program and its borrowers. We urge the subcommittee to extend its prohibition through fiscal year 1987.

Once again, thank you for your interest and support for rural telephone systems and the REA program. Changes in our industry and problems in the rural economy make REA more important than ever.

Your work on this and other rural programs has improved the quality of life immeasurably in America's small towns and farms. I appreciate this opportunity to speak before you, and look forward to your questions.

Mrs. SMITH. Thank you, Mr. Magruder.

Let me tell you, I was intensely interested in what you were saying. I was sorry about the interruption. You know, my District is a District of very small telephone companies, just as you were talking about, it has made it possible for us to have phone service in Nebraska, just as it has in Kentucky, and I go along with you that the need is still there, and very great, and so, you are with a bunch of friends here.

[Mr. Magruder's statement follows:]

Testimony of

William Magruder

Manager, Duo County Telephone Cooperative Corporation

NATIONAL TELEPHONE COOPERATIVE ASSOCIATION

before the

Subcommittee on Agriculture, Rural Development
and Related Agencies

Committee on Appropriations

U. S. House of Representatives

April 15, 1986

Mr. Chairman, Members of the Committee, good morning. My name is Bill Magruder and I am Manager of the Duo County Telephone Cooperative. Today, I also represent the National Telephone Cooperative Association (NTCA). NTCA is a national trade association representing more than 450 small and rural telephone systems in over 40 states. I appreciate the opportunity to testify before you today concerning an issue of great importance to the NTCA membership and to the rural consumers they serve, the Rural Electrification Administration (REA).

Duo County Telephone Cooperative serves approximately 7,400 subscribers in rural south-central Kentucky. It was established in 1954. At that time, there was minimal telephone service in the centers of the small towns in the area, and none at all in the surrounding rural area. The coop exists because of the REA program -- one of its earliest actions was to obtain an REA loan to build a telephone system linking the towns and the countryside.

I thank the Subcommittee for its strong support of REA and the Rural Telephone Bank (RTB). Without your work, it is doubtful that the program could have remained in existence. The nation would be in the same situation as it was in 1949, when only 38% of America's farms and rural homes had telephone service. We would not have a telephone network that stretches uninterrupted from one coast to the other. For this, rural America and consumers of American farm products everywhere owe a debt of gratitude.

A CHANGING INDUSTRY

Universal telephone service has been a long standing national goal. Significant progress was made in achieving this goal in a regulatory system which, in the past, required long-distance service to contribute to the support of local facilities it used. According to the 1983 American Housing Survey of the U. S. Department of the Census, only 10% of households in rural America do not have access to a telephone.

However, as this subcommittee is aware, the regulatory system that fostered our universal service has been dramatically altered. It is being replaced with a system in which long distance rates are decreasing and local customers are bearing a greater burden of the expense of building the facilities shared by local and long-distance service. This will be a significant change for REA borrowers who rely on long-distance service for an average of 66% of their total operating revenues.

The most obvious change in this new regulatory environment was the imposition of a $1 per month access charge in 1985, a charge which will double this year. The Federal Communications Commission (FCC) will re-examine the access charge issue this June and may opt to further increase access charges. There are also other significant but less obvious increases in local rates which we expect due to deregulation. State regulators are also considering changes in the way local and long-distance costs are paid, and are shifting more of the costs to local subscribers. The encouragement of local competition to provide telephone-type services to the profitable, large-volume customers also places a greater burden on the average residential user.

These changes are taking place in the context of an economically depressed rural economy. Many NTCA members report drop-off of rural customers due to the hardship now experienced by American farmers. One Missouri system reports losing 113 of its subscribers in the last three months. Telephone deregulation and the shifting of cost to the local subscriber could not have occurred at a worse time for rural America.

ADMINISTRATION PROPOSES TO ELIMINATE THE PROGRAM

Proposals to eliminate the Rural Electrification Administration (REA) program are also untimely. As you know, the Administration has proposed the following for the REA telephone program in FY 1987:

- Reduce REA insured loans by 82% and RTB loans by 37%;
- Phase-out of REA and RTB lending by FY 1990;
- Increase interest rates to the Treasury borrowing rate plus one and one-eighth percent;
- Eliminate the REA telephone loan guarantee program and RTB capitalization;
- Impose a 5% loan origination fee and a fee to cover defaults; and
- Sell assets of the REA Revolving Fund and the Rural Telephone Bank (RTB).

NTCA urges the subcommittee to reject these proposals. The increase in interest rates is unnecessary at the present time, since REA is already empowered to require higher density borrowers that can afford to do so to borrow from the RTB at higher rates. The RTB is currently lending at 8% - about the same interest rate the Bank for Cooperatives will lend to telcos.

We oppose the loan origination fee because it will significantly increase the cost of borrowing from REA. Some of our members estimate that the paperwork and time delays experienced with REA loans already adds 1-2% points to the loans. The fee to cover defaults is inappropriate -- the telephone program has not had a single default since its inception in 1949 and there is no indication that there will be one in the future. The sale of the loan assets of the RTB and the Revolving Fund will weaken both the Bank and the Fund, and adversely affect the ability of the Bank to obtain money from the Treasury. We also question the appropriateness of selling government assets at 50% of value.

Cutting off REA financing at a time when local subscribers are already facing higher rates due to deregulation could be harmful to universal telephone service. The benefits of the REA program accrue to the consumers and not to the telephone system. Eliminating this source of affordable financing could result in telephone service in rural areas which is inferior to that in urban areas.

REA TESTIMONY

In recent testimony before this subcommittee, REA staff stated that telephone borrowers have prospered during the past four years. They concluded that this past prosperity indicates that REA funding will not be needed in the future.

The data used to support this claim is subject to question, however. First, it is not clear that the borrower group that was compared (the borrowers in 1981 and 1984) is comprised of the same companies. Mergers among REA borrowers and the entry of new borrowers would affect the comparability of the 1981 and 1984 data. (Last year, REA had applications from 19 first-time borrowers. This year, REA has applications from 12 new borrowers.) The figure for net income or margin as a percent of total revenue is not consistent with the information in REA's own 1984 Statistical Report, Rural Telephone Borrowers (REA Bulletin Number 300-4), which states that net income or margins represents 13 cents out of every dollar of revenues. This is only a one cent increase over the comparable 1980 figure. By comparison, taxes and general office salaries and other expenses increased by the same amount over the same period.

Compared to the larger independent telephone companies, REA borrowers have not prospered as much as REA staff suggest. From 1980-1984, REA borrowers experienced a growth in total operating revenues of 66%. Larger independent telcos experienced a growth in total operating revenues of 288% during the same period. Similarly, REA borrowers have an average ratio of net worth to total asset of 28.5%. To get an idea of the contrast, compare this with the debt-equity ratio of 42% for the Regional Bell Operating Companies.

Moreover, it is questionable whether REA borrowers will continue to prosper during the coming years. As discussed earlier, there are several major policy shifts which could reverse or diminish historical revenue and net income growth trends. The phase-out of settlements among states, competition for service to selected customers and the shift in allocation and recovery fixed plant costs could provide less revenue for local telephone companies.

The Administration also claims that REA borrowers are servicing urban areas. This is not true of telephone borrowers, according to REA's own statistics. The 1984 Statistical Report (REA's most recent statistical publication) states that the average REA telephone borrower has a density of only 5.5 customers per mile of telephone line. Duo County has only 6.5 customers per route mile. That is low by anyone's estimate.

NTCA disagrees with the statement that the elimination of REA and the RTB will not jeopardize the economic health of REA telephone borrowers. Reasonably priced financing is needed to: to provide affordable telephone service to areas that remain unserved; upgrade to single-party service the 11.5% of subscribers who have party-line service; replace obsolete aerial cable and worn out buried cable and replace outmoded "step" switching equipment, with digital switches which are capable of providing equal access and custom calling features.

Most REA borrowers do not qualify for commercial loans to finance these projects. Commercial banks usually require borrowers to have debt-to-equity ratios over 40%, considerably higher than that of most REA borrowers.

REA staff also state that they are prevented from targeting loans to borrowers based on need. As proof, they point to Congressional action to prohibit REA from implementing its general funds policy. We do not agree with REA's interpretation of this policy. The general funds policy used investments in affiliated companies, RTB stock purchases required by the Rural Electrification Act, and other telco assets to deny REA loans and loan advances to 77% of eligible telephone borrowers. REA used a threshold level of 8% of total telephone plant to deny such loans. To our knowledge there has not been a dramatic increase in new loan applications or draw downs on current loans as earlier predicted by some REA staff. Elimination of the general funds criterion has removed a significant obstacle to obtaining REA loans for needed telecommunications projects. NTCA asks for the continuation of the prohibition during FY 1987.

REA does tailor its loans to a telephone borrowers' financial condition. REA is required to give first priority to use of RTB monies for borrowers which have more than 3 subscribers per mile of line and can meet a 1.5 Times-Interest-Earned-Ratio test. RTB loans are made at an interest rate which reflects the Bank's cost of money and are blended with insured (5%) loans. For example, Duo County's last loan was at 7.5% - a blend of insured loan funds and 11.5% RTB funds. The RTB was conceived as a "credit ladder" which moves telephone systems to higher-interest loans as they grow financially stronger.

ENGINEERING AND STANDARDS DIVISION

Finally, we would like to bring to the subcommittee's attention the continuing problems with the REA Engineering and Standards Division. NTCA appreciated last year's report language stating that the vacancies should be filled. In the past year, however, two additional professionals from the Telephone Engineering and Standards Division have left, making a total of eight vacancies. This represents about one-third of the Division. Clearly, such a significant loss of personnel compromises the Division's effectiveness.

The Power and Communication Contractors Association has estimated that REA's standardized contracts and specifications saved $133 million on rural telephone and electric construction projects in one year. To lose these cost efficiencies by eliminating the REA Engineering and Standards Division will increase the cost of REA-financed construction and require use of more loan funds, resulting in higher interest costs for both the government and the borrowers and higher subscriber telephone bills.

We request that the subcommittee continue to emphasize the importance of maintaining a strong Engineering and Standards Division.

In closing, NTCA appreciates this subcommittee's past support for REA and the RTB and urges you to continue your fine work on behalf of rural America.

Thank you.

TUESDAY, APRIL 15, 1986.

FEDERAL CROP INSURANCE

WITNESSES

RALPH BEAL, MASTER MARKETERS' ASSOCIATION OF AMERICA

KEN CLARK, PRESIDENT, MASTER MARKETERS' ASSOCIATION OF AMERICA

REID SIMPSON, MASTER MARKETERS' ASSOCIATION OF AMERICA

JAMES H. DUNEGAN, MASTER MARKETERS' ASSOCIATION OF AMERICA

ROBERT M. BOR, COUNSEL

Mrs. SMITH. Now, we have moved right over to Mr. Bor, Master Marketers'. Now, you are with Master Marketers'?

Mr. BOR. Yes. Mrs. Smith, it is indeed a pleasure to be here today with you. I am counsel for the Master Marketers' Association of America, and we have at the table a number of members of the Association.

Mrs. SMITH. We would be delighted to have you introduce them, so their names will be in the record, and your full statement will be in the record, and anyone else's full statement.

Mr. BOR. Thank you.

Let me first introduce Mr. Ralph Beal, who will be presenting the testimony for the Association, and he in turn will introduce the other members of the Association here today.

Mr. BEAL. Thank you, Mrs. Smith. On my right, I would like to introduce Ken Clark, who is the President of our Master Marketers' Association.

On my left is Reid Simpson, who is a fellow member of the Board, and we also have at the table, Mr. James Dunegan, who is an individual crop insurance agent.

We thank you for this opportunity, and am president of my own crop insurance agency, which is headquartered in Honey Grove, Texas.

We are a member of the private sector who sell and service Federal Crop Insurance to the nation's farmers.

Of utmost concern to us is the farmer and his acceptance of the program. The intent of the 1980 amendments to the Federal Insurance Act was to provide an affordable program in lieu of a disaster program assuring survival of the farmer and continual production of food and fiber for the nation.

The wisdom of Congress at the time established a formula whereby the farmer paid approximately 70 percent of the insurance cost with the government assisting with 30 percent of the cost. With this formula, Congress and the taxpayer realized a substantial savings over current disaster programs that existed at that time.

Before you today, we realize there is debate to shift the entire cost of this program to the farmer. We cannot overemphasize to you the disasterous effect this would be on program participation with the current farm economy. The farmer today is at his knees and simply cannot pay additional costs.

We would also like to take a moment to summarize the administrative costs of Federal Crop Insurance since the 1980 Crop Insurance Act. In 1981, the Federal Crop Insurance program had an administrative cost of $79,968,181 with premiums of $376,661,460.

By contrast, in 1985, the Federal Corp Insurance program produced $440,301,000 in premiums with administrative costs of $199,604,000. This indicates that in four years, FCIC has produced 17 percent more business at 250 percent more cost. This does not represent the 1980 expectations of Congress.

The committee should be aware that extensive studies have been performed by various government and private agencies, such as GAO, OIG, Ashby-Armstrong and others which clearly show the cause of such exorbitant increased costs. We urge the committee to review this available data to put a halt to unnecessary administrative expenses.

Another matter we want to address to the committee is the APH program and the burden that it has placed upon companies such as ourselves, the agent and the farmer. We cannot measure the cost of this program due to its complexity. We do know it is very expensive.

Of equal concern is that it is severely hampering participation in the program. Agents and farmers alike do not understand nor have the time to complete the necessary forms and requirements to participate in this program.

As an example, it is not unusual for the farmer and his agent to complete 15–20 documents to properly insure his crops. These paperwork requirements have seen building up during the past few years.

This, coupled with the constant changes, have created confusion among farmers, agents and even lenders and deterred participation in the program. We do not believe this was the intent of Congress.

As this committee is aware, there exists a two delivery system for distributing Federal Crop Insurance to the farmer. Both delivery systems must be treated equally. Equal treatment will ensure greater program participation which we believe is the intent and desire of this committee and others. Current participation is far from the hopes of Congress.

But, this committee must realize that FCIC management in the past has recommended the elimination of one such delivery system represented by private agents. Unfortunately, this effort once again produced confusion and once again farmer participation suffered. We would hope that the committee and others would pay close attention to independent studies that we have previously mentioned to ensure fairness and equal treatment to each delivery system.

In conclusion we have shared with you the problems of FCIC. We are certain the committee members are familiar with many of these problems. These problems are severe and should be addressed.

However, none of us can overlook the accomplishments of Federal Crop Insurance. Farmers and lenders alike look to it as a valuable tool to ensure their survival in the event of a disaster. As one lender put it and I quote, "Federal Corp Insurance is a great idea, but the paperwork burden has made it a nightmare to participate in the program."

It is the feeling of the Master Marketer's Association that the problems that exist can be corrected. We are confident that by working with all members of the private sector, FCIC can achieve the intent of 1980 acts.

But let us not put additional hurdles in front of us by removing the premium subsidy that now exists. The farmer today simply does not have the money and financial ability to bear the entire expense of this valuable tool which many appreciate.

Thank you.

[Mr. Beal's statement follows:]

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April 15, 1986

TESTIMONY

BEFORE THE HOUSE APPROPRIATIONS COMMITTEE

Mr. Chairman and distinguished members of the Committee, my name is Ralph Beal. I am President of my own Crop Insurance Agency, headquartered in Texas, and I am here today representing the Master Marketer's Association of America. We are a member of the Private Sector who sell and service Federal Crop Insurance to the Nation's farmers.

Of utmost concern to us is the farmer and his acceptance of the program. The intent of the 1980 amendments to the Federal Insurance Act was to provide an affordable program in lieu of a disaster program assuring survival of the farmer and continual production of food and fiber for the Nation. The wisdom of Congress at the time established a formula whereby the farmer paid approximately 70% of the insurance cost with the Government assisting with 30% of the cost. With this formula, Congress and the taxpayer realized a substantial savings over current disaster programs that existed at that time.

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Page 2

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The Committee should be aware that extensive studies have been performed by various government and private agencies, such as GAO, OIG, Ashby-Armstrong and others which clearly show the cause of such exorbitant increased costs. We urge the Committee to review this available data to put a halt to unnecessary Administrative expenses.

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As this Committee is aware there exists a two delivery system for distributing Federal Crop Insurance to the farmer. Both delivery systems must be treated equally. Equal treatment will ensure greater program participation which we believe is

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In conclusion we have shared with you the problems of FCIC. We are certain the Committee members are familiar with many of these problems. These problems are severe and should be addressed. However, none of us can overlook the accomplishments of Federal Crop Insurance. Farmers and lenders alike look to it as a valuable tool to ensure their survival in the event of a disaster. As one lender put it and I quote, "Federal Crop Insurance is a great idea, but the paperwork burden has made it a nightmare to participate in the program." It is the

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Ralph Beal

Mrs. **Smith**. Thank you very much. In my hometown, we have a master marketer who has been so active, Bill Ray, that he has been back here working on this legislation and some of you may know him. I appreciate this testimony very much.

I know the crop insurance program does have a lot of problems. We are trying to help some of them. We don't want to create any more.

Mr. **Watkins** [presiding]. Thank you very much.

James Dunegan?

Mr. **Dunegan**. Thank you.

Mr. **Watkins**. As you know I have been in contact with a lot of people you serviced, and know of your concerns.

Mr. **Dunegan**. We appreciate your help.

Mr. **Watkins**. As you know, we will make your entire statement part of the record. If you would like to summarize and highlight any of the things you want us to know personally, we shall appreciate that.

Mr. **Dunegan**. Okay.

Mr. Chairman and distinguished members of this subcommittee. My name is Jim Dunegan. I am a crop insurance agent located at Durant, Oklahoma on the Red River.

I do business in about a 150-mile radius from Durant in both Texas and Oklahoma primarily in the sales and servicing of Federal crop insurance, although I am a licensed agent and sell other forms of insurance, too.

As part of my book of business, I currently service 361 farmers in the area for Federal crop insurance. This is down somewhat from 1984–1985, as a I lost about $200,000 in premium, about 18 percent of my crop insurance business, simply because the Federal crop insurance keeps changing its mind about its programs to the point it is making a liar out of me, and causing my farmers to throw up their hands and quit using crop insurance.

As a successful agent, I have been contacted this past 12 months by several insurance companies who do business with Federal crop insurance under its program of reinsurance, or multiple peril, as it is more commonly called.

These companies have made me a number of lucrative offers if I would transfer may business to them and away from the Federal crop insurance program.

As a matter of fact, it sounded so good that I tried one of these companies and placed some of my business with them. You can imagine my surprise when I got to work one morning and found out that the company decided not to write crop insurance any more in my area, and sent my policyholders a notice of cancellation.

My farmers were upset and so was I. But I was certainly grateful I hadn't placed all of my business on Multiple Peril paper, so I could return these farmers to Federal crop insurance and continue their crop insurance protection.

But these past three or four years, I have had to face challenge after challenge from these companies in order to retain my business. They have tried to buy my business; they have tried to take it away through competition; and they have tried to steal my subagents from me.

With your permission, Mr. Chairman, I would like to submit for the record a copy of a letter recently sent to agents in my area by a Multiple Peril company. They offer to pay agents about 22 percent base commission.

That is more commission than my Master Marketing company makes in total.

I feel very fortunate that I give my farmers the type of service that makes them want to stay with me.

Mr. Chairman, I feel I am performing an important service to farmers in my community through the Federal Crop Insurance Program. These farmers rely on me to tell them how to make the best use of the crop insurance program, and also to complete the documentation necessary to keep them in the program.

But the Federal Crop Insurance Corporation changes the rules on me so fast—I guess to better service the Multiple Peril companies—that even its own field people don't know what is going on. You can imagine my problems in explaining the insurance program to my farmers one day, and having to turn around the next day or a few days later and tell them:

"No. What I told you the other day has been changed. Now it is this way."

Farmers are very sensitive people these days, and they don't like to be told something that isn't so. I have complained on numerous occasions to be Federal Crop Insurance Corporation management in Washington, D.C. and everywhere else I can, including my Congressional representatives, trying to get some good common sense back in this program.

As a result, the Federal Crop Insurance Corporation has subjected my agency to as complete a review as possible. Mr. Chairman, there have been anywhere from two to five FCIC reviewers in my agency continuously since last June.

They have managed to harass my farmers and generally make some of them disgusted enough to quit the crop insurance program. I will have to say my operation must be the cleanest one in the country after all the work done by FCIC.

It looks to me, Mr. Chairman, that Federal crop insurance could spend some of its time looking at the Multiple Peril companies who, if the information I get is accurate, may be guilty of overplaying claims in the millions of dollars a couple of years ago in cotton in Texas, in raisins in California, and in soybeans and other crops this past year in the southeast part of the country.

If crop insurance would take just one or two of the people they have had checking me and use them for this other purpose, the taxpayer may be saved a great deal of money. I offer that just as a suggestion.

My biggest complaint, Mr. Chairman, is some of the new programs introduced by FCIC in the past year or two that are a total waste of the taxpayers' money. I specifically refer to the Actual Production History or APH program invented by the management of FCIC.

My farmers don't understand this program, and most of the FCIC employees in my area don't understand it. About 95 percent of my people "don't want to mess with it," and prefer to take what is called a "T", or transitional, yield, which establishes their guarantees on a county average basis, mostly below what my farmers would actually qualify for if actual production were used.

Since my farmers preferred to take average yields this year, I did not get involved with the massive amounts of paperwork required to establish a yield on most of my customers.

However, since I was coming to testify before this committee and I wanted to represent other agents who have the same complaint, I asked a friend of mine in Colorado to supply a sample of the amount of paper it takes to sign up a single farming operation.

I couldn't believe the amount of paper he sent to me, and I understand this is for one father-son operation in Weld County, Colorado, involving about 936 acres of corn and 667 acres of dry beans for a total of 1,603 acres insured.

I would ask your permission again, Mr. Chairman, to submit this documentation for the record.

I took the time to count all the pieces of paper for the two insurance contracts it took for this operation. Can you believe it involves 214 separate pieces of paper and 126 different forms? That is one piece of paper for every 7.5 acres and one form for every 12.7 acres.

That must surely set some sort of record for insurance or for anything else, for that matter.

We may not be the smartest people out in our part of the country, but we sure don't require this much paper to do business. There ought to be a law against this. Think of all the trees we could save if we could eliminate this government paperwork.

I examined a file for an insured used 20 years ago, and it had two pieces of paper on it, an application and an acreage report. Times have surely changed.

Mr. Chairman, the FCIC had a program prior to this APH stuff that made more sense to a country boy like me. It was called Individual Yield Coverage, or IYC, and it gave my farmers the option to insure under average county yields or, if they preferred, they could prove their yields through ASCS and receive higher coverages at less premium.

They had the incentive to keep proper records, and the choice not to do so if that is what they preferred.

By making the APH program mandatory, the management of FCIC has alienated most of my farmers and, as you can see by the documents I have submitted, created a nightmare of paperwork that generally serves as a waste of the taxpayers' money.

Another problem we are going to have with our farmers next year will be created if FCIC goes through with its current intention of permitting only one insurance unit in a county. They did this in their soybean program in the southeast part of the country with disastrous results, and they are fixing to repeat the mistake in other programs all over the country.

It is amazing to me, Mr. Chairman, that the crop insurance program operated with units for some 40 years with a greater measure of success than today. So why, all of a sudden, is everything a farmer wants in an insurance program being taken away?

While I can't speak for everybody or all agents, I can say that my people think it is high time some good sense management was returned to the Federal Crop Insurance Corporation.

I want to thank you, Mr. Chairman and members of this committee for allowing me some of your valuable time. It is hard for a person like me to get up before a group like this, but there comes a time that if we don't speak out, we might just as well fold up our tent and go home.

I will be glad to answer any questions you might have.

Mr. **Watkins**. Jim, thank you very much. I am glad you are here. I have a few questions.

I have heard from a lot of farmers in your area concerning cancellation of policies.

I am also interested in your mentioning the harassment of agents. You said you have had as high as five FCIC reviewers in your office at one time?

Mr. **Dunegan**. That is right.

Mr. **Watkins**. How long a period did you have one, two or up to five in your office?

Mr. **Dunegan**. Several weeks. I had five, and they contended it was because they had some people in the region they didn't have any place for them to work. I checked with the District Director, I found an agent in the northern part of the State has several wheat losses; he had two reviews, they told me did one 100 percent, they did all my loss, 100 percent.

Actually, I think they did the whole file 100 percent. They just lived there in Durant since last June until a week ago Friday.

Mr. **Watkins**. It might not have been too bad of an industry for the area for a while. You know, it seems to me that FCIC must have come down to single you out. Do you have any indication why they were doing that?

I am wondering if it is because of my expression of interest, and concern about the problems that a lot of my farmers have expressed about the program that this has occurred.

Mr. **Dunegan**. I feel like that I was singled out from letters and complaints that may have been made. There is no proof of this. I confronted them with it, I confronted the District Director, I confronted the reviewers with it, and some of the people, as a matter of fact, that is the way I got the information that other agents——

Mr. **Watkins**. Instead of taking this as an opportunity to be constructive, they took it as a means of trying to be destructive and causing a lot of unrest and harassment there of the program.

I read the Old Republic Company's letter that you indicated has come in, on Multiple Peril type programs. You could actually, I guess, see just a direct input by FCIC in promoting them.

Did you have any basis?

Mr. **Dunegan**. I don't have any basis for that. There are lots of people, I have a lot of business, and there is a lot of people that came up with my name and knowledge of my business that shouldn't have had it, you know, I don't know where this came from.

Mr. **Watkins**. That disturbs me when I think our government and some of our agencies are basically taking a vendetta against people who are trying to be constructive and offer good suggestions. I know I have sat down around the coffee table with several people in that area, and discussed these particular problems.

We have an opening in FCIC, maybe we need to get someone who knows how to operate the Corporation that has some practical experience.

Mr. DUNEGAN. I agree to that.

Mr. WATKINS. We might be able to help reconstruct it in this way. I was also quite impressed that you had gone to the trouble of getting the entire documents and didn't realize that there is in the neighborhood of 212 pages to complete the process.

Mr. DUNEGAN. After I got those, I had another agent tell me he had one that had 300.

Mr. WATKINS. This Administration is on record of trying to do away with paperwork. Are they trying to do away with agencies, or are they trying to do away with paperwork? I don't know, but with the volume of paper for this one application I think we can see that this is an unbearable amount of work that has to be done to insure a crop. I knew it would be quite an astounding number of pages, but I had no idea it was that heavy.

Mr. DUNEGAN. The smaller farmer would be 15 to 20 in a lot of cases, and with the short time we have, it is impossible to do all this with the deadline.

Mr. WATKINS. From your first-hand experience dealing with farmers trying to make this program work, what would you say would make this program work efficiently, and make it a workable program? What do you think?

Mr. DUNEGAN. Well, first——

Mr. WATKINS. What do you think should be done?

Mr. DUNEGAN. Naturally, it is hard to say, but we need to get with something that is going to work for the farmer and help them and make a good program out of, and make it work for them, that is what I am trying to teach people to do in this area.

By the time I get this worked up, here comes a change through the mail. We have changed the program. This disgusted people when you tell them one thing and three or four months later, you are going to tell them something else.

It is hard to keep them in the program. That is one thing. It seems that both delivery systems should go out and write new business and quit trying to steal off of everybody.

We have got a small percentage of the business written in the United States, and if the leader of the companies would tell their people write new business, actually it is easier to write a new customer than it is to transfer somebody; it is for me; I think we need to get a program that the farmer understands, that is simple, and he is not looking to make money out of, he is looking at it as an insurance program he wants to get his investment back that is what lender want him to do, wants to be guaranteed of getting what he——

Mr. WATKINS. One of the biggest complaints we have is the fact all farmers are based under the county structure and not based upon their own yields, and that many of the good farmers can't afford to take an average situation.

It would be simple enough to work with ASCS to establish that production level and efficiency of that farmer. They provide it for loans and other information. I think that is one of the important recommendations that has been made. This would probably allow more farmers to participate, but cannot do it now, because of restraints that have been put on them. The farmer that may not be as efficient will be the one that wants to participate, and the better farmer would not want to participate at all.

Mr. **Dunegan**. That is right.

Mr. **Watkins**. I would be interested in getting what you consider to be the top reforms that need to take place and that you find in working with farmers.

I think we are talking about supplying protection, but we are not trying to make a giveaway where someone can abuse the program.

I would like for you to think about that on your way back home, and try to list those and drop that to the Committee and my office.

Mr. **Dunegan**. Okay.

Mr. **Watkins**. Because, I think all of us on this Committee want this thing to be cleaned up and work, and if not, we may have to be looking at some other direction to try to go for farmer protection.

I do appreciate your being here, and willingness to provide this information, and your willingness to speak loud and clear to me that you are sincerely concerned about the program, and you want to try to get it to become a more workable type program.

Thank you so much.

Mr. **Dunegan**. Thank you, Mr. Watkins.

[Mr Dunegan's statement follows:]

Dunegan Crop Insurance

Durant, Oklahoma 74701

[Testimony presented April 15, 1986 before the Appropriations Subcommittee on Agriculture, Rural Development, and Related Agencies by Jim Dunegan, President, Dunegan Crop Insurance, Durant, OK]

Mr. Chairman and distinguished members of this subcommittee. My name is Jim Dunegan. I am a crop insurance agent located at Durant, OK on the Red River. I do business in about a 150 mile radius from Durant in both Texas and Oklahoma primarily in the sales and servicing of Federal Crop Insurance although I am a licensed agent and sell other forms of insurance, too.

As part of my book of business, I currently service 361 farmers in the area for Federal Crop Insurance. This is down somewhat from 1984-1985 as I lost about $200,000 in premium [about 18% of my crop insurance business] simply because the Federal Crop Insurance keeps changing its mind about its programs to the point it's making a liar out of me and causing my farmers to throw up their hands and quit using crop insurance.

As a successful agent, I have been contacted this past 12 months by several insurance companies who do business with Federal Crop Insurance under its program of reinsurance or Multiple Peril as it is more commonly called. These companies have made me a number of lucrative offers if I would transfer my business to them and away from the Federal Crop Insurance program.

As a matter of fact, it sounded so good that I tried one of these companies and placed some of my business with them. You can imagine my surprise when I got to work one morning and found out that the company decided not to write crop insurance any more in my area and sent my policyholders a notice of cancellation. My farmers were upset and so was I. But I was certainly grateful I hadn't placed all of my business on Multiple Peril paper so I could return these farmers to Federal Crop Insurance and continue their crop insurance protection.

But these past three or four years, I've had to face challenge after challenge from these companies in order to retain my business. They've tried to buy my business, they've tried to take it away through competition and they've tried to steal my subagents from me. With your permission, Mr. Chairman, I'd like to submit for the record a copy of a letter recently sent to agents in my area by a Multiple Peril company. They offer to pay agents about 22% base commission. That's more commission than my Master Marketing company makes in total. (Submit Old Republic Letter dated March 13, 1986)

I feel very fortunate that I give my farmers the type of service that makes them want to stay with me.

Mr. Chairman, I feel I'm performing an important service to farmers in my community through the Federal Crop Insurance program. These farmers rely on me to tell them how to make the best use of the crop insurance program and also to complete the documentation necessary to keep them in the program.

But the Federal Crop Insurance Corporation [FCIC] changes the rules on me so fast--I guess to better service the Multiple Peril Companies--that even its own field people don't know what's going on. You can imagine my problems in explaining the insurance program to my farmers one day, and having to turn around the next day or a few days later and tell them: "No. What I told you the other day has been changed. Now it's this way."

Farmers are very sensitive people these days and they don't like to be told something that isn't so. I've complained on numerous occasions to the Federal Crop Insurance Corporation management in Washington, D. C. and everywhere else I can, including my Congressional representatives, trying to get some good common sense back in this program.

As a result, the Federal Crop Insurance Corporation has subjected my agency to as complete a review as possible. Mr. Chairman, there have been anywhere from two to five FCIC reviewers in my Agency continuously since last June. They have managed to harass my farmers and generally make some of them disgusted enough to quit the crop insurance program. I'll have to say my operation must be the cleanest one in the country after all the work done by FCIC.

It looks to me, Mr. Chairman, that Federal Crop Insurance could spend some of its time looking at the Multiple Peril companies who, if the information I get is accurate, may be guilty of overpaying claims in the millions of dollars a couple of years ago in cotton in Texas, in raisins in California, and in soybeans and other crops this past year in the Southeast part of the country. If Crop Insurance would take just one or two of the people they've had checking me and use them for this other purpose, the taxpayer may be saved a great deal of money. I offer that just as a suggestion.

My biggest complaint, Mr. Chairman, is some of the new programs introduced by FCIC in the past year or two that are a total waste of the taxpayers money. I specifically refer to the Actual Production History or APH program invented by the management of FCIC. My farmers don't understand this program and most of the FCIC employees in my area don't understand it. About 95% of my people "don't want to mess with it" and prefer to take what is called a "T" or transitional yield which establishes their guarantees on a county average basis--mostly below what my farmers would actually qualify for if actual production were used.

Since my farmers preferred to take average yields this year, I did not get involved with the massive amounts of paperwork required to establish a yield on most of my customers. However, since I was coming to testify before this committee and I wanted to represent other agents who have the same complaint, I asked a friend of mine in Colorado to supply a sample of the amount of paper it takes to sign up a single farming operation. I couldn't believe the amount of paper he sent to me and I understand this is for one father-son operation in Weld County, Colorado involving about 936 acres of corn and 667 acres of dry beans for a total of 1,603 acres insured.

I would ask your permission again, Mr. Chairman, to submit this documentation for the record. [Submit PCG Forms & accompanying documentation].

I took the time to count all the pieces of paper for the two insurance contracts it took for this operation. Can you believe it involves 214 separate pieces of paper and 126 different forms? That's one piece of paper for every 7.5 acres and one form for every 12.7 acres. That must surely set some sort of record for insurance or for anything else for that matter.

We may not be the smartest people out in our part of the country, but we sure [redacted] don't require this much paper to do business. There ought to be a law against this. Think of all the trees we could save if we could eliminate this government paperwork. I examined a file for an insured used about 20 years ago and it had two pieces of paper in it--an application and an acreage report. Times have surely changed!

Mr. Chairman, the FCIC had a program prior to this APH stuff that made more sense to a country boy like me. It was called Individual Yield Coverage or IYC and it gave my farmers the option to insure under average county yields or, if they preferred, they could prove their yields through ASCS and receive higher coverages at less premium. They had the incentive to keep proper records, and the choice not to do so if that's what they preferred.

By making the APH program mandatory, the management of FCIC has alienated most of my farmers and, as you can see by the documents I have submitted, created a nightmare of paperwork that generally serves as a waste of the taxpayers money.

Another problem we're going to have with our farmers next year will be created if FCIC goes through with its current intention of permitting only one insurance unit in a county. They did this in their soybean program in the Southeast part of the country with disastrous results and they're fixing to repeat the mistake in other programs all over the country.

It's amazing to me, Mr. Chairman, that the crop insurance program operated with units for some 40 years with a greater measure of success than today. So why, all of a sudden, is everything a farmer wants in an insurance program being taken away?

While I can't speak for everybody or all agents, I can say that my people think it's high time some good sense management was returned to the Federal Crop Insurance Corporation.

I want to thank you Mr. Chairman and members of this committee for allowing me some of your valuable time. It's hard for a person like me to get up before a group like this, but there comes a time that if we don't speak out we might just as well fold up our tent and go home. I will be glad to answer any questions you might have.

TUESDAY, APRIL 15, 1986.

FEDERAL CROP INSURANCE

WITNESS

MIKE FELT, VICE CHAIRMAN, AMERICAN ASSOCIATION OF CROP INSURERS

W. D. CLASSEN, CHAIRMAN, AMERICAN ASSOCIATION OF CROP INSURERS

Mr. WATKINS. Mike Felt? You are representing the American Association of Crop Insurers. We will make your written testimony part of the record, and we encourage you to summarize and highlight your testimony.

Mr. FELT. Thank you, Mr. Chairman. I am Mike Felt, Vice Chairman of American Association of Crop Insurers, and I have with me today Bill Classen who is Chairman of our association, also.

Before I start to orally summarize my testimony, I would also like to present, Mr. Chairman, to you, for the record, a report on the crop insurance program, national summary that has been done by our association.

It is a five-year report that shows state by state the progress of the crop insurance program, both from the private and the Federal side and I would like to submit that for the committee.

We have done reports by states so any members of the committee that do not have their state report, we will be pleased to supply them from our association.

The American Association of Crop Insurers was organized in 1980 by private insurance industry leaders who believed it to be in the best interest of American agriculture to institute a multiple peril crop insurance program.

Our association has been the only trade association which has supported the multiple peril crop insurance program consistently since enactment of the 1980 Crop Insurance Act amendments

We have been and will continue to be fully supportive of implementing the multi-peril crop insurance program.

Mr. Chairman, I know that you have had some concerns regarding the crop insurance program and whether or not this program will ever be fully successful.

I sometimes share your concerns because I, as well as many other private insurance companies, are often frustrated with the many administrative changes which are made in this program.

An inordinate and confusing amount of paperwork, for example, now complicates the delivery of the crop insurance program.

I am convinced, however, that the Congress enacted sound legislation in 1980 when the Crop Insurance Act amendments were passed, and our association continues to work with FCIC to resolve these problems and to deliver a crop insurance program to our nation's farmers.

I should point out, Mr. Chairman, that in spite of these bureaucratic inefficiencies there have been many successes in the crop insurance program.

During the last five years of operation the acreage insured under crop insurance has increased from roughly 26 million acres in 1980 to almost 60 million acres in 1985.

This is an increase of almost 250 percent and is phenomenal in the crop insurance business.

In addition, virtually all farmers nationwide are eligible for protection on the crops of almonds, barley, corn, cotton, flax, grain, sorghum, oats, peanuts, raisins, rice, soybeans, sugar beets, sugarcane, sunflowers, tobacco and wheat.

Most growers in major production areas can now insure their crops on any of 33 different commodities. This is far superior to the traditional USDA approach of providing low yield protection to the growers of only about six major crops on a national basis.

In the limited time that is available to me I wish to emphasize the following points.

In order to succeed, the Federal Crop Insurance Program must first achieve stability and simplicity. We must eliminate the uncertainty of funding and the constant changes and uncertainties in administration of the program.

On the funding side, our fate is in your hands. On the administration of the program, our fate is in the hands of the Secretary of Agriculture and others in the executive branch.

I would like to address first the funding question. 1985 was not a very good year in the multiple peril crop insurance program.

During that year, the Federal Crop Insurance Corporation ran out of money four times. FCIC was unable to pay the claims of insured farmers as well as unable to pay companies who were delivering the program.

It became very apparent to us that the program could not continue to survive if it were operated in this fashion. You cannot have an insurance program that does not have funding to pay the losses of the insured when they are due.

To constantly run out of money to pay claims makes a joke of an insurance program.

One way to address this problem is to provide the Federal Crop Insurance Corporation with adequate reserves to pay for losses.

However, this seems unlikely in today's budgetary problems. It seems unlikely that the Administration will request, and Congress will appropriate, reserves adequate to properly fund a crop insurance program.

Therefore, it is essential that the Federal Crop Insurance Corporation be able to borrow funds from the Commodity Credit Corporation.

This authority was provided for the first year of operation of the Federal crop insurance program. However, the authority lapsed after the first year.

Thus, we were gratified when the Congress included an amendment in the 1985 Farm Bill to again give the Federal Crop Insurance Corporation the ability to borrow funds from the Commodity Credit Corporation when it ran out of money to pay claims.

We in the American Association of Crop Insurers are quite concerned about language in the current supplemental appropriation bill which would eliminate this FCIC borrowing authority.

There is nothing that could do more to completely destroy the operation of this program than the passage of such an amendment.

Therefore, we ask that this committee reconsider its position on the proposed legislation which would eliminate this borrowing authority.

If you fail to do so, ultimately it is the American farmer who will suffer the most.

The other issue with regard to the funding of the Federal Crop Insurance Program is that of the Administration's budget recommendation for Fiscal Year 1987 and beyond.

Under the Administration's proposal, Federal financial support for the crop insurance program would be gradually withdrawn and eliminated altogether by 1991.

Mr. Chairman, we in AACI strongly opposed the Administration's budget request for 1986 in which the premium subsidy for crop insurance would have been eliminated.

We strongly oppose their current budget recommendations for reducing Federal financial support. We simply do not think that it is either possible or proper to withdraw financial support for crop insurance when the disaster payment program and the disaster loan program are being eliminated or withdrawn.

The last remaining disaster protection for farmers is the crop insurance program. To reduce or eliminate Federal financial support of the crop insurance program will simply make the program unworkable and unattractive to farmers.

Compared with the costly inefficient disaster payment program and disaster loan program that the government has funded in the past, the crop insurance program, where the farmer pays a premium for protection, based on his own business decision, is quite a bargain.

We submit that Federal financial assistance for this program is not only cost efficient but it is absolutely necessary for there to be any safety net for farmers who suffer a disaster through no fault of their own.

We simply do not believe it is possible at this time of grave economic distress to place the entire burden for paying for the crop insurance on the back of the American farmer.

In addition to the funding problems and needs of the Federal Crop Insurance Program, there are also many administrative problems.

We are hopeful that the Department of Agriculture under the leadership of Secretary Lyng will retool and improve upon the administration of the Federal Crop Insurance Program.

There is an extremely high level of frustration about this program on the part of those of us in the private sector who deliver it.

This sense of frustration goes from the agent who is in the field selling and servicing the policy up to those of us who are the chief executives of the companies who employ those agents.

This frustration stems from unnecessary program complexities and the failure of FCIC to provide timely and understandable rates and rules along with simplified paperwork.

I am hopeful that under new leadership at the Department of Agriculture the FCIC can be made to work properly.

I believe that we in the private sector have proved that we can deliver crop insurance because of our long history of delivering private crop hail insurance.

I believe that the American independent agent will deliver this program if given half a chance. He will deliver the program if he is given a simplified program and program certainty.

For this program certainty and program stability to take place, we must have the cooperation of the Congress on the funding side, and the cooperation of the executive branch in proper administration. We are hopeful that we can get both.

Mr. Chairman, in the short time that is left for me, I would just like to address one other issue.

There seems to be a common conception upon some members of Congress that the private insurance sector is getting rich in delivering this program.

Nothing can be further from the truth. Not only is the private sector delivering the program at far less cost than the Federal Government, but it is unfortunately doing so at a loss.

Because of the huge amount of paperwork and program changes it is very difficult for anyone from the agent level up to the company level to make a profit.

There has been much speculation about what the proper rate of reimbursement to the private sector is.

However, there has been only one definitive study of this question and that was done by an independent accounting firm which contracted with the Federal Crop Insurance Corporation.

This audit performed by Mitchell Titus have examined companies delivering crop insurance for FCIC.

In every case, the Mitchell Titus officers found that the rate of reimbursement was inadequate.

The deficiency ranged from 4.7 percent to 6 percent for the companies audited.

In other words, of the companies that were audited, not one company even broke even on delivering the crop insurance program, much less obtained a profit.

Without proper economic incentives, we cannot expect private sector to continue to devote large resources to this program.

Mr. Chairman, in summary, I appreciate your giving me the opportunity to come and testify regarding the funding of the Federal Crop Insurance Corporation.

Our association firmly believes that the most equitable, least expensive, long term program of dealing with all of the natural disasters is through a nationwide, multiple peril crop insurance program.

It has shown without doubt that we are capable of delivering the program and we are committed to its full implementation.

However, we cannot do it alone. We must have your help.

Thank you.

Mr. **Watkins**. Thank you very much for your testimony. We appreciate it and we all have had a concern in wanting to do what we can about trying to have some kind of protection for our farmers.

There is a multitude of controversy going on across the country concerning this program. I can assure you there is a lot more attention being given to it than you can imagine.

Mr. **Felt**. Thank you.

Mr. **Watkins**. We appreciate very much your testimony.

Mr. **Felt**. Thank you for the opportunity of being here.

Mr. Watkins. We stand adjourned until 10:00 o'clock tomorrow morning.

[Mr. Felt's full statement follows:]

STATEMENT OF MIKE FELT
VICE CHAIRMAN
AMERICAN ASSOCIATION OF CROP INSURERS

before the

HOUSE APPROPRIATIONS COMMITTEE
SUBCOMMITTEE ON AGRICULTURE,
CREDIT AND RELATED AGENCIES

Tuesday, April 15, 1986

OFFSET
CAMERA COPY

Mr. Chairman, as Vice Chairman of the American Association of Crop Insurers, it is indeed a pleasure for me to once again appear before this distinguished Subcommittee to discuss funding for the Federal Crop Insurance Corporation.

The American Association of Crop Insurers was organized in 1980 by private insurance industry leaders who believed it to be in the best interest of American agriculture to institute a multiple peril crop insurance program. Our association has been the only trade association which has supported the multiple peril crop insurance program consistently since enactment of the 1980 Crop Insurance Act amendments. We have been and will continue to be fully supportive of implementing the multi-peril crop insurance program.

Mr. Chairman, I know that you have had some concerns regarding the crop insurance program and whether or not this program will ever be fully successful. I sometimes share your concerns because I, as well as many other private insurance companies, are often frustrated with the many administrative changes which are made in this program. An inordinate and confusing amount of paperwork, for example, now complicates the delivery of the crop insurance program. I am convinced, however, that the Congress enacted sound legislation in 1980 when the Crop Insurance Act amendments were passed and our association continues to work with FCIC to resolve these problems and to deliver a crop insurance program to our nation's farmers.

I should point out, Mr. Chairman, that in spite of these bureaucratic inefficiencies there have been many successes in the crop insurance program. During the last five years of operation the acreage insured under crop insurance has increased from roughly 26 million acres in 1980 to almost 60 million acres in 1985. This is an increase of almost 250% and is phenomenal in the crop insurance business. In addition, virtually all farmers nationwide are eligible for protection on the crops of almonds, barley, corn, cotton, flax, grain, sorghum, oats, peanuts, raisins, rice, soybeans, sugar beets, sugarcane, sunflowers, tobacco and wheat. Most growers in major production areas can now insure their crops on any of 33 different commodities. This is far superior to the traditional USDA approach of providing low yield protection to the growers of only about six major crops on a national basis.

In the limited time that is available to me I wish to emphasize the following points. In order to succeed, the Federal Crop Insurance Program must first achieve stability and simplicity. We must eliminate the uncertainty of funding and the constant changes and uncertainties in administration of the program.

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One way to address this problem is to provide the Federal Crop Insurance Corporation with adequate reserves to pay for losses. However, this seems unlikely in today's budgetary problems. It seems unlikely that the Administration will request, and Congress will appropriate, reserves adequate to properly fund a crop insurance program. Therefore, it is essential that the Federal Crop Insurance Corporation be able to borrow funds from the Commodity Credit Corporation. This authority was provided for the first year of operation of the federal crop insurance program. However, the authority lapsed after the first year.

Thus, we were gratified when the Congress included an amendment in the 1985 Farm Bill to again give the Federal Crop Insurance Corporation the ability to borrow funds from the Commodity Credit Corporation when it ran out of money to pay claims. We in the American Association of Crop Insurers are quite concerned about language in the current supplemental appropriation bill which would eliminate this FCIC borrowing authority. There is nothing that could do more to completely destroy the operation of this program than the passage of such an amendment. Therefore, we ask that this Committee reconsider its position on the proposed legislation which would eliminate this borrowing authority. If you fail to do so, ultimately it is the American farmer who will suffer the most.

The other issue with regard to the funding of the Federal Crop Insurance Program is that of the Administration's budget recommendation for fiscal year 1987 and beyond. Under the Administration's proposal, federal financial support for the crop insurance program would be gradually withdrawn and eliminated altogether by 1991. Mr. Chairman, we in AACI strongly opposed the Administration's budget request for 1986 in which the premium subsidy for crop insurance would have been eliminated. We strongly oppose their current budget recommendations for reducing federal financial support. We simply do not think that it is either possible or proper to withdraw financial support for crop insurance when the disaster payment program and the disaster loan program are being eliminated or withdrawn. The last remaining disaster protection for farmers is the crop insurance program. To reduce or eliminate federal financial support of the crop insurance program will simply make the program unworkable and unattractive to farmers. Compared with the costly inefficient disaster payment program and disaster loan program that the government has funded in the past, the crop insurance program, where the farmer pays a premium for protection, based on his own business decision, is quite a bargain. We submit that federal financial assistance for this program is not only cost efficient but it is absolutely necessary for there to be any safety net for farmers who suffer a disaster through no fault of their own. We simply do not believe it is possible at this time of grave economic distress to place the entire burden for paying for the crop insurance program on the back of the American farmer.

In addition to the funding problems and needs of the Federal Crop Insurance Program, there are also many administrative problems. We are hopeful that the Department of Agriculture under the leadership of Secretary Lyng will retool and improve upon the administration of the Federal Crop Insurance Program.

There is an extremely high level of frustration about this program on the part of those of us in the private sector who deliver it. This sense of frustration goes from the agent who is in the field selling and servicing the policy up to those of us who are the chief executives of the companies who employ those agents. This frustration stems from unnecessary program complexities and the failure of FCIC to provide timely and understandable rates and rules along with simplified paperwork. I am hopeful that under new leadership at the Department of Agriculture the FCIC can be made to work properly. I believe that we in the private sector have proved that we can deliver crop insurance because of our long history of delivering private crop hail insurance. I believe that the American independent agent will deliver this program if given half a chance. He will deliver the program if he is given a simplified program and program certainty. For this program certainty and program stability to take place, we must have the cooperation of the Congress on the funding side, and the cooperation of the executive branch in proper administration. We are hopeful that we can get both.

Mr. Chairman, in the short time that is left for me, I would just like to address one other issue. There seems to be a common conception upon some Members of Congress that the private insurance sector is getting rich in delivering this program.

Nothing can be further from the truth. Not only is the private sector delivering the program at far less cost than the federal government, but it is unfortunately doing so at a loss. Because of the huge amount of paperwork and program changes, it is very difficult for anyone from the agent level up to the company level to make a profit. There has been much speculation about what the proper rate of reimbursement to the private sector is. However, there has been only one definitive study of this question and that was done by an independent accounting firm which contracted with the Federal Crop Insurance Corporation. This audit performed by Mitchell Titus have examined companies delivering crop insurance for FCIC. In every case, the Mitchell Titus officers found that the rate of reimbursement was inadequate. The deficiency ranged from 4.7% to 6% for the companies audited. In other words, of the companies that were audited, not one company even broke even on delivering the crop insurance program, must less obtained a profit. Without proper economic incentives, we cannot expect private sector to continue to devote large resources to this program.

Mr. Chairman, in summary, I appreciate your giving me the opportunity to come and testify regarding the funding of the Federal Crop Insurance Corporation. Our Association firmly believes that the most equitable, least expensive, long term program of dealing with all of the natural disasters, is through a nationwide, multiple peril crop insurance program. It has shown without doubt that we are capable of delivering the program and we are committed to its full implementation. However, we cannot do it alone, we must have your help. Thank you.

WEDNESDAY, APRIL 16, 1986.

ORGANIC FARM RESEARCH

WITNESS

HONORABLE JAMES WEAVER, A REPRESENTATIVE FROM THE STATE OF OREGON.

Mr. WHITTEN. The Committee will come to order. We now recognize our colleague and friend, the Honorable James Weaver.

Mr. WEAVER. Thank you very much, Mr. Chairman, for allowing me this opportunity to testify, and the distinguished ranking minority member, my dear friend and former neighbor, Congresswoman Smith.

Mr. Chairman, today we face a crisis in American agriculture. Our agricultural policies have forced farmers to overproduce, which has brought about a decline in prices and losses in soil and water.

In the essence when I think of our policy today, Mr. Chairman, that is that today we have the opportunity to begin determining practices on our farms that can conserve our soil and water. Because our problem is overproduction, and therefore conservation is going to both help restore our capital base, soil and water, as well as bring higher prices to farmers.

I commend the Chairman for his leadership in seeking new profitable ways to help our farmers. And I assure him I will join him in support of those policies.

Organic farm research is a critical first step in allowing our farmers to begin planning for the future. The Agricultural Productivity Act passed by the House of Representatives and incorporated into law in the 1985 Farm Bill, the research embodied in that Act will establish a system of 36 research projects on 12 different sites. These projects will be designed to test agricultural production systems which will cut production costs, save energy, conserve soil and water resources.

It is this systems approach which is not now being addressed by the USDA. The present research program does do some specific research in these areas, but not as a systems approach. These systems will make use of such things as green manures, animal manures, intercropping systems, and biological controls of weeds and insects.

The program will also instruct the Secretary of Agriculture to compile existing information in this area and identify the gaps and carry out a research practical to fill in such gaps.

To begin to do this essential start in finding farmers to find efficient, cost effective means for growing food, Mr. Chairman, $2 million is needed annually. The USDA estimates that $100,000 is required per scientist in their research. And with 36 projects this would allow only six tenths of a scientist per year per project. This is a small price to pay for this invaluable help that will help our farmers feed our people in the years to come. This money would be distributed among land grant institutions by an advisory panel.

Mr. Chairman, I am asking not only that the $2 million be appropriated to get this research program underway, but I also believe it is essential—and I request the Committee to do so—to include language within your appropriations bill directing the USDA to spend this money for the purposes outlined in the House-passed Agricultural Productivity Act. In that way we can be certain that the projects will be carried out in a way that will provide the best data at the lowest cost.

At a time when many of our small and medium sized farmers, those farmers who are the backbone of our agricultural production system are going over, it is essential we expend our efforts to develop farming systems that reduce cost, conserve water and energy, and rebuild the soil. Together with the conservation provisions of the 1985 Farm Bill, the organic research provisions incorporated into that bill start us on the road to assuring food for Americans and profit for farmers.

I voted, Mr. Chairman—even though I disliked some of the provisions of the 1985 Farm Bill, I voted for the 1985 Farm Bill conference report because of these essential provisions. And I welcome supporting your appropriations bill as well with the knowledge that it holds out new hope for our farmers.

Thank you very much, Mr. Chairman.

Mr. **Whitten**. Thank you, Mr. Weaver. We appreciate your interest there.

As you know, we face a real serious situation this year with Gramm-Rudman and the 1987 budget cuts. I believe the budget recommends that 9 billion odd dollars be reduced from the Agricultural Department budget. It is the most drastic cut made in any other part of our government, so it leaves a real problem.

But the thing that many people overlook is the fact that labor is able under law to organize and to strike to have increased wages. Also, industry has the right to have a markup as they may determine. Since World War II industry and labor have increased their share of the consumer dollar from 49 percent to 73 percent. The American farmer has only 27 percent left to buy from industry and labor. Since 1945 the farmers costs have gone up about 1100 percent, but his prices have gone up only 300 percent.

Our problem is that our government has been penalizing our farmers and making them pay for our foreign policy. I pointed this out to the President in '82, and again about six weeks ago. In 1973 we held up our farm production through embargoes. We did it again in '74, and '75. In 1980, we did not like what Russia did so we put another embargo into effect. In addition, the Department has refused to use the Commodity Credit Corporation or private American traders to sell what we had competitively.

When, Mr. Butz was here he used the big international exporters and paid them $396 million in commissions to handle our exports. So we have been letting the American farmer pay the cost of our foreign policy.

Our records here show that the people in 125 countries need our food and fiber, yet we have been selling them guns, ammunition, and planes. So I am all for research to reduce costs and to strengthen our food production, but the American farmer needs the Department to be competitive and retain our share in the world markets.

The biggest advantage we have got over Russia is food production. Under the PIK program, I do not know whether you followed it or not, we paid out about $17 billion and gave away 11 percent of our markets to our competitors.

So while we are interested and want this research, it certainly will not help the farmer to stay solvent. I have been behind the Farm Credit System and support it. But if the farmer does not make money, if he has lost title to the farm, there is no need to have it. I am of the opinion this research is important, but it will not do anything to help the American farmer for years to come.

Now, somebody has said that we do not need to help the farmer because he is going out of business. I believe in research and education. We have got to restore funds for land grant college, for research, and we have got to put all of these things back in the bill because the budget proposes to cut them out.

I can agree with you as to the value of this, but not as a substitute for selling competitively what our farmers produce.

Mr. **Weaver**. Forgive me, Mr. Chairman, but you mentioned former Secretary Butz. The problem with agriculture today, Mr. Chairman, is we overproduce and we are selling too cheap.

Mr. **Whitten**. He would not overproduce if we would help him sell what he has in world markets. I told the President this in 1982. Instead of selling what he produced and letting him have the benefits, we held his commodities off of world markets and embargoed shipments to Russia and other countries. The Department reimbursed the middle man for his losses. But they did not compensate the farmer who produced it for his losses.

Mr. **Weaver**. Mr. Chairman, if you will forgive me, the problem is not selling more but selling for a higher price.

Mr. **Whitten**. Historically a third of our production has been for foreign markets. Now we are buying $140 billion on credit from foreign countries for things that we could be producing ourselves.

Mr. **Weaver**. I want to tell you that I agree with you completely. But you cited Mr. Butz——

Mr. **Whitten**. He did not use CCC to sell competitively.

Mr. **Weaver**. The reason I cited Mr. Butz is he prayed for a drought in order to decrease supply.

Mr. **Whitten**. We have had some that have not prayed very much.

Mr. **Weaver**. That is right, sir. But you mentioned unions, Mr. Chairman, you said the farmers have to sell to——

Mr. **Whitten**. I grew up around a country store. I learned early that you cannot sell if you do not make your price competitive.

Mr. **Weaver**. How did the unions get that higher wage?

Mr. **Whitten**. By law.

Mr. **Weaver**. By withholding labor from the market. The farmer, in order to get a higher price, must withhold some of his goods from the market so that he gets the higher price. If we just dump our stuff on the markets we are going to break everything.

The union got more wages because they withheld labor from the market. We must give the farmer the opportunity to withhold some of his supply from the market so that he can get a higher price, more dollars for growing less. Now, this is why this bill is so essential. Now is the time to get the farmer to grow less and more efficiently.

Mr. WHITTEN. Of course, I agree with more efficiency. But I feel that holding our goods off the markets is not the answer. Now, the supplemental bill before the House right now, I wrote the language. I provided that we should return to the old law where folks made money and bought land, and should get away from the present law where they are losing the land they bought under the old program.

Mr. WEAVER. I thought your language was excellent. And I strongly supported it. I just want to say this is consistent with that language. What we want to do is help the farmer grow less at less cost, more efficiently, and get a much higher price just the way the unions have done it.

Mr. Chairman, you are talking to a senior member of the Agricultural Committee who first introduced the barrel for bushel bill 12 years ago in which I said let us do what OPEC did, let us sell less oil and less farm commodities but get a sharply higher price for it. And that is what we should have been doing all along instead of bankrupting our farmers, destroying our soil and water in the process, forcing our farmers to grow more and more and more and getting less and less money for what they grow. That is ridiculous.

Grow less, conserve your soil, get a higher price. That should be our policy, Mr. Chairman.

Mr. WHITTEN. I do not argue with the value of your proposal, but I must say it is no answer as long as we hold U.S. production off world markets.

Mr. WEAVER. We want to sell less in world markets and get a sharply higher price.

Mr. WHITTEN. Under the PIK program we paid farmers for not producing cotton.

Mr. WEAVER. I was appalled by PIK and voted against it and worked against it on the Agriculture Committee. I am the author of the national grain reserve, I offered the amendment on the floor of the House.

Mr. WHITTEN. I know your heart is right.

Mr. WEAVER. That took it off the market.

Mr. WHITTEN. I agree that your proposal has value.

Mr. WEAVER. It is part of the answer. I think you have done a magnificent job, and I look forward to supporting the Chairman in what he is doing.

Mr. WHITTEN. We appreciate your proposal too.

You know, it is a funny thing, years ago this Committee tried to get additional money for research on production. We had all sorts of trouble with the press, the news media. I just changed it to "money for reseach" to reduce the cost of production and had no trouble thereafter.

Thank you for your testimony.

Mr. WEAVER. Thank you, sir.

[The statement of Congressman Weaver follows:]

TESTIMONY OF CONGRESSMAN JIM WEAVER

BEFORE THE HOUSE APPROPRIATIONS COMMITTEE

SUBCOMMITTEE ON AGRICULTURE, RURAL DEVELOPMENT
AND RELATED AGENCIES

April 16, 1985

Mr. Chairman, today we face a crisis in American agriculture. Our agricultural policies have forced farmers to overproduce, which has brought about a decline in prices and a loss of soil and water.

I commend the chairman for his leadership in seeking new, profitable ways to help our farmers and assure him I will join him in support of those policies.

Organic farm research is a critical first step in allowing our farmers to begin planning for the future. Agricultural Productivity research will establish a system of thirty six research projects on twelve different sites. These projects will be designed to test agricultural production systems which will cut production costs, save energy and conserve soil and water resources. It is this systems approach which is not now being addressed by the USDA. These systems will make use of such things as green manures, animal manures, intercropping systems and biological control of weeds and insects.

The program will also instruct the Secretary of Agriculture to compile existing information in this area, identify gaps and carry out a research program to fill in such gaps.

To begin to do this essential start in helping farmers find efficient cost effective means for growing food two million dollars per year is needed. The USDA estimates that 100,000 dollars are required per scientist year in their research. With thirty six research projects distributed over twelve locations that results in only six-tenths of a scientist year per project. This is indeed a small price to pay for research that could help our farmers.

This money would be distributed among land grant institutions by an advisory panel based on research proposals submitted to the panel. Research workers at these land grant institutions are most interested in developing these projects.

Mr. Chairman, I am asking not only that the two million be appropriated to get this research program underway, but I also believe it is essential to include language directing the USDA to spend this money for the purposes outlined in the House passed Agricultural Productivity Act. In that way we can be certain that the projects will be carried out in a way that will provide the best data at the lowest cost.

At a time when many of our small and medium sized farmers - those farmers who form the backbone of our agricultural production system - are going under, it is essential that we expand our efforts to develop farming systems that reduce costs, conserve water and energy, and rebuild the soil. I am joined by many prominent agricultural scientists in the belief that this research program will speed the development of these systems. I urge you, Mr. Chairman to include two million in the Agriculture Appropriations Bill to achieve these objectives and to help American farmers meet the challenges of the next century. It is a very small percentage of the research budget yet the benifits are substantial.

Together with the soil conservation provisions of the 1985 Farm Bill, the organic research provisions start us on the road to assuring food for Americans and profit for farmers. I voted for the 1985 farm bill conference report because of these provisions. I welcome supporting your appropriations bill as well with the knowledge that it holds out new hope for our farmers.

WEDNESDAY, APRIL 16, 1987.

NUTRITION RESEARCH ON AGING

WITNESSES

DR. ROBERT M. RUSSELL, HUMAN NUTRITION RESEARCH CENTER ON AGING, TUFTS UNIVERSITY

TERRY C. BRADFORD, ADMINISTRATIVE DIRECTOR

Mr. WHITTEN. We next have Dr. Russell. Mrs. Smith, will you assume the chair until I return?

Mrs. SMITH. Dr. Russell if you are here, will you come up.

Dr. RUSSELL. Yes.

Mrs. SMITH. Please introduce your fellow panelist. Your entire statement will be in the record, and also the statement of your friend if he has a prepared statement.

You may proceed as you wish.

Dr. RUSSELL. Thank you very much.

On my left is Mr. Bradford, who is the administrative director of the Nutrition Research Center at Tufts.

Madame Chairwoman, members of the Subcommittee, and staff, on behalf of the USDA Human Nutrition Research Center on Aging at Tufts, the President of Tufts, I would like to express my appreciation for the opportunity to appear before you. The support of you and your Committee is enabling scientists at the Human Nutrition Research Center on Aging to explore how nutrition affects the degenerative condition associated with aging and determine the nutrient requirements of elderly Americans necessary to insure optimal health and function.

In the three and a half years since the Nutrition Center moved into its research facility on the health science campus at Tufts, the investment made by your Committee and the rest of Congress has yielded significant returns. Applications of research finding from the Nutrition Research Center on Aging will serve to improve the health of elderly Americans and reduce the billions of dollars spent each year on aging-associated conditions such as osteoporosis, cataracts, and hypertension.

I would like to share with you what the governments investment in the Nutrition Research Center over the past few years has already yielded. There is not time for me to go into this morning the 12 research programs being conducted at the Center, but I would like to focus on a few programs that will in my opinion have a public health impact in the near future.

The Nutrition Center decided early on to invest in research on bone metabolism and aging. Bone mineral loss is a normal condition of aging in both men and women. Women have more of a problem with bone mineral loss. This is due to the lessor bone mass that females have to begin with. We at the Center have begun a five year longitudinal study of calcium supplementation to see if back bone demineralization can be diminished by the use of supplements.

Also possible negative effects of calcium supplementation are being investigated. For example, it has been recently shown at the

Nutrition Center calcium may decrease the ability of the intestines to absorb iron. Considering the widespread use of calcium supplements by elderly women at the present time in this country, both the positive and negative influence of such supplements are important areas of study.

Moreover, vitamin D, which controls calcium metabolism, is being studied. The scientists at the Center have shown to date that aging decreases the capacity of human skin to produce vitamin D after ultraviolet light exposure. This decreased ability of skin to synthesize vitamin D could translate into an increased dietary requirement for this vitamin in the elderly individual.

A second accomplishment is that of a discovery of a gene marker which is identified by nutrition scientists which is associated with high density lack of protein or HDL deficiency in the blood. As has been widely reported in the press, HDL is associated with protection against coronary artery disease and heart attacks and is probably the single most important protective factor that we know of.

This recently discovered gene marker can now be used to identify individuals at a very young age who will be at risk for coronary artery disease in the future. If these individuals can be discovered early enough using this marker, early dietary changes and recommendations can be instituted in these individuals which will retard or prevent these diseases from appearing as the individual ages. This marker has a tremendous public health potential.

The third area which has shown promise in the last few years is the area of nutrition and cataract prevention. A Nutrition Center scientist has shown that vitamin C can prevent light induced clumping of proteins in the human lense. Protein clumping or aggregation in the lense is thought to be causally related to cataracts.

Dietary supplements such as vitamin C can in fact prevent protein aggregation of the lense. Such nutrients may offer protection against cataract formation and impact upon the billion dollars spent annually treating this disease.

I have been talking so far about prevention of certain age-related degenerative changes by nutritional means. Nutrition Research Center, as I have already mentioned, has made similar progress in defining dietary requirements for the elderly. The establishment of an actual RDA for nutrients, that is a recommended dietary allowance, comes about as you know only after evaluating the results of many different investigations and approaches.

The Nutrition Center has begun metabolic studies using human subjects, normally elderly volunteers, to establish vitamin K requirements, the vitamin necessary for blood clotting; B-6 requirements, which is necessary for protein and eye nerve function; and vitamin B-12, necessary for folic synthesis.

Thus the past and present investment of creative energy, money, time, and facilities has given us a head start in understanding the relationship between diet and aging. Present levels of support enable the Human Nutrition Research Center on Aging to utilize 55 percent of its total capacity.

The blue in this chart are the areas of the facility which are presently not used. As the chart indicates, incremental increases over the next two years will enable the Nutrition Center to achieve 100 percent of its research potential. Additional support will not only permit Nutrition Center to keep pace with the rising cost of research but will allow expansion of very promising research in the areas of the aging, diet, and immunology and bioavailability. This is a real investment in the future.

New research tools for conducting safe human studies, for example, using non-radioactive isotopes, can be made available to Nutrition Center researchers for the first time.

The ultimate goal of the Human Nutrition Research Center on Aging is to provide consumers, producers, and the health care community the information and tools to use diet and nutrition as a means to prevent or retard the degenerative processes of the aging and promote vigor and quality of the lives of the elderly. Your continued support and the support of this Committee is the foundation upon which we are attaining this goal.

Thank you very much.

Mrs. Smith. Thank you very much.

And I think that your testimony, Dr. Russell, has dealt with a most important issue, and it has been very constructive testimony. I am much interested in what you say about osteoporosis, the mineral loss of bones, about the lack of absorption of vitamin D, about the importance of HDL, importance of vitamin C and vitamin K.

And also I am distressed as you say that only 55 percent of your facility is being used. And I am sure that is because you do not have adequate financing. This whole area is so important. You know, we are under tight budgetary constraints here.

Dr. Russell. Yes.

Mrs. Smith. But we consider this very important. Let me say that we are going to do the very best we can. And I do think, as you say, that this is a vitally important investment in the future. I have talked with the Director of the National Institute of Health about this whole area.

And I noted that you did not make any comment about doing research on the problem of mental deterioration. Do you do any work in that field?

Dr. Russell. Yes. We are doing some work in that field, primarily, first of all, with regard to actually defining the nutrients that are most important, for example vitamin B-6 is one that we are investigating at the present time in the possible relationship to senile dementia and Alzheimers disease. And we are doing some work in that at the present time. And that program is growing.

Mrs. Smith. The country is growing so much more aware of the dangers of Alzheimers disease. And, of course, the problem is bigger as people live to an older age. But you have made a very constructive contribution, and we appreciate it. We are glad you were here.

Dr. Russell. Thank you very much.

Mrs. Smith. Thank you very much.

[The statement of Dr. Robert M. Russell follows:]

PROGRESS AND FUTURE OPPORTUNITIES

HNRC BUDGET REQUIREMENT FISCAL YEAR 1987 AND 1988

In recognizing its mandate to protect and enhance the quality of life for Elderly Americans, the Congress of the United States invested in the USDA Human Nutrition Research Center on Aging at Tufts University (HNRC). In the three and a half years since the HNRC moved into its research facility on the Health Sciences Campus of Tufts University, the return on that investment has been significant.

The mission of the HNRC, as established by Congress, is to examine the role of nutrition in the aging process and the dietary needs of the elderly. HNRC scientists are determining the ways in which diet and nutritional status influence the onset and progression of aging by employing experimental animals, tissue cultures, and human subjects. They are exploring the ways in which diet, alone and in association with other factors, can delay or prevent the onset of degenerative conditions associated with the aging process. This research will determine nutrient requirements during aging and the ways in which an optimal diet, in combination with genetic, physiological, psychological, sociological, and environmental factors, may promote health and vigor over the life span of man.

Scientists at the HNRC are addressing three general questions of central importance to this mission: 1) How does nutrition influence the progressive loss of tissue function with aging? 2) What is the role of nutrition in the genesis of major chronic degenerative conditions associated with the aging process, e.g. bone mineral loss and visual disorders? and 3) What are the nutrient requirements necessary to maintain optimal functional well-being of older people?

Research Progress and Achievements

The investment over the past few years of creative energy, money, time, and facilities in the HNRC has yielded a high return that positively affects the status of health and quality of life of Elderly Americans. Highlights of specific achievements over the past twelve months include:

- HNRC scientists studying vitamin D metabolism have shown that aging decreases the capacity of human skin to produce vitamin D from ultra-violet light exposure. This decreased ability of the skin to synthesis vitamin D could translate into an increased dietary need for vitamin D in the elderly individual.

- Vitamin E supplementation has been found to reverse the age-related decline in immune function in senescent animals. These studies suggest that dietary interventions may present a new approach to enhance immune responsiveness and reduce the incidence of infectious disease, cancer and prolonged recovery from illness in the elderly.

- An HNRC research group has discovered that vitamin C can prevent light induced protein aggregation in the human lens. Protein aggregation in the lens is thought to be causally related to cataracts. If further research shows that antioxidants such as vitamin C do in fact prevent protein aggregation in the lens, such nutrients may offer protection against cataract formation with age and impact upon the billion dollars spent annually treating cataracts.

- A gene marker has been identified by HNRC scientists which is associated with high density lipoprotein (or HDL) deficiency in the blood. HDL is associated with protection against coronary artery disease and heart attacks. This gene marker may be useful in identifying at a very young age, individuals at risk for coronary artery disease and for recommending early dietary interventions in order to diminish the chance that coronary artery disease will ensue as age progresses. These findings have caused considerable media and public interest after being published in the New England Journal of Medicine.

- The prevalence of atrophic gastritis, an asymptomatic condition of reduced gastric acid secretion, has been found to increase with age. This condition occurring in 30% of those over the age of 65 adversely effects the absorption of vitamin B12 and folacin and alters gastrointestinal bacterial flora. Special dietary recommendations for this elderly subpopulation are being considered by HNRC scientists.

- Dietary requirements for protein intake have been compared between sedentary and very physically active middle-aged and older men. It appears that those who habitually engage in endurance exercise require significantly more dietary protein to maintain their nitrogen balance.

- Calcium supplements have been found to decrease the absorption of iron but not zinc from a meal. Considering the wide spread use of calcium supplements by elderly women, the influence of this nutrient on other trace minerals is an important area being studied at the HNRC.

- Preliminary evidence suggests that a significant proportion of the elderly population have subclinical manifestations (elevated levels of abnormal prothrombin) of vitamin K deficiency or an altered ability to metabolize vitamin K. These investigations will lead to new dietary vitamin K requirements for the elderly.

In addition to these scientific achievements, in FY'85 the HNRC acquired an electron microscope to provide new research capabilities. This is proving to be an invaluable research tool in studying tissue effects of micronutrient depletion and repletion as well as immune and neuropsychological disorders.

Fiscal Year 1986

At the beginning of FY'86, the HNRC had an appropriation of $12,000,000. The Gramm-Rudman deficit reduction act lowered this to $11,400,000. With this budget, 50 MD and PhD scientists and 170 research, health care and support staff are engaged in research which utilizes 55% of the HNRC's total capacity.

HNRC operations are organized around six units: Laboratory Research, Metabolic Research Unit, Laboratory Animal Medicine, Biostatistics and Scientific Computing, Facility Operations, and Administration. The efforts of each unit are directed toward supporting and facilitating the HNRC scientists' laboratory research.

Scientists and their laboratory technicians conduct their tests and analysis in 40 laboratories within the HNRC. New funds received in FY'86 increases the utilization of laboratory facilities from 48% in FY'85 to 66%.

The Metabolic Research Unit, one of the largest in the nation, has a 28 bed residential facility, a complete metabolic dietary kitchen, an exercise physiology laboratory and a comprehensive nutrition biochemical evaluation laboratory. These capabilities enable HNRC scientists to conduct long-term resident and free-living human nutrition studies. The Metabolic Research Unit is utilized at 50% capacity with the current FY'86 budget.

Laboratory Animal Medicine provides a rigorously controlled environment in which HNRC scientists can employ animal models, predominantly rodents, in whole life span nutrition studies which parallel and complement the human nutrition studies. Presently, 40% of the 29 animal holding rooms and related support facilities are in use.

Biostatistics and Scientific Computing provides research design and scientific computing for all HNRC research protocols. This unit, along with Facility Operations and Administration, provide the HNRC scientist with the necessary support and services to conduct nutrition and aging research in an effective and cost efficient manner.

The investment in the HNRC through FY'86 has provided scientific evidence of the critical role of nutrition in the human aging process. For the first time, optimal levels of intake for a variety of nutrients are being defined for the elderly as the HNRC scientists expand their understanding of the mechanisms of nutrient absorption and utilization by aging individuals. Research in the areas of micronutrient requirements and bioavailability have been greatly expanded at the HNRC. Because of the promising work to date, new pilot studies on the role of nutrition as it effects immunological functions of the elderly have been initiated this year.

Fiscal Year 1987 and 1988

The FY'86 budget of $11,400,000 achieves 55% utilization of the total research potential of the HNRC. Incremental increases of $2,600,000 in FY'87 and $2,000,000 in FY'88 will carry the present momentum to 100% capacity and utilization of the HNRC's research program.

Continuing the investment in the HNRC will have tremendous implications in containing the ever growing health care costs of the elderly. This is particularly important to the efforts of achieving real, long-term reductions in the nation's deficit.

An increase of $2,600,000 in FY'87 will enable the HNRC to develop its new initiatives to investigate the role of nutrition as it affects immunological functions of the elderly into a full research program. Human studies supported by the Metabolic Research Unit will achieve 100% utilization, thus enabling the application of laboratory findings to humans. The HNRC can acquire gas chromatography/mass spectrophotometry capabilities to: 1) safely conduct bioavailability studies of the absorption and retention of nonradioactive, stable isotopes of minerals such as calcium, iron, zinc and copper in elderly human subjects; 2) determine and quantify the optimal level of energy intake requirements of the elderly; and 3) measure minute quantities of essential biological molecules such as amino acids and vitamin metabolites with great precision. By eliminating the use of radioactive materials, new risk-free ethical studies on human subjects can begin for the first time at the HNRC. Additional funds will also augment the capabilities of Laboratory Animal Medicine and Scientific Computing to allow these facilities to keep pace with the needs of HNRC researchers.

With an FY'88 increase of $2,000,000, the HNRC will achieve 100% research capacity. Prompt gamma neutron activation will be added to the existing ^{40}K whole body counting research effort. This research approach will allow for the most technically advanced method of assessing changes in body composition and nutrient kinetics/utilization in living human subjects. Laboratory Animal Medicine will achieve 100% capacity by establishing permanent breeding and senescent colonies, thus assuring the availability of appropriate animal models for whole life span and nutrition studies. The HNRC will have fully developed research programs in the areas of bioavailability, micronutrient requirements and immunologic functions of the elderly. These areas will be supported and enhanced by collaborative programs in nutritional epidemiology, dermatology, ophthalmology and endocrinology studies of the elderly.

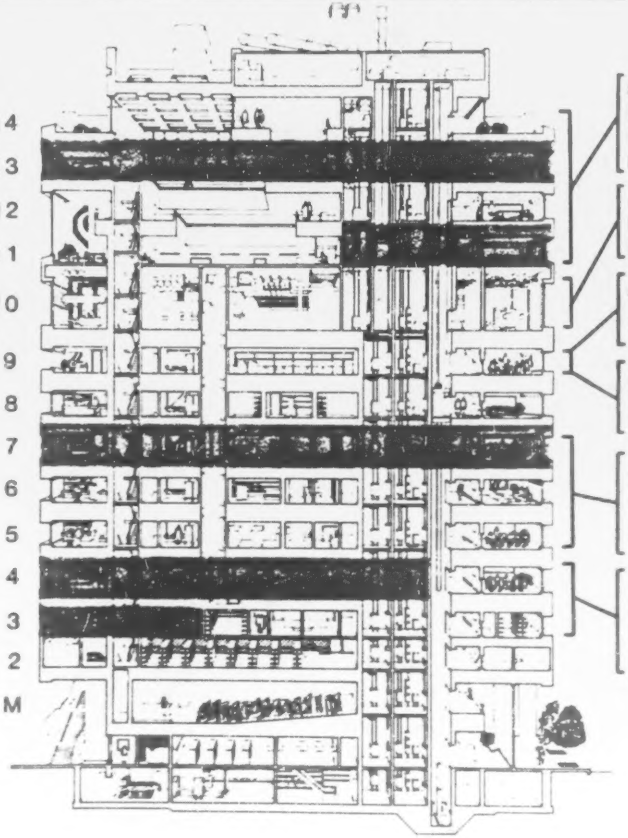
In the United States, a female age 65 may expect to live another 18 years and a male an additional 14 years. The ultimate goal of the HNRC research is to provide information which will enable the producers and consumers of American food products and the health care community to prepare optimal diets to prevent or retard the degenerative processes of aging and promote vigor and quality in the lives of the elderly.

A $4,600,000 budget increase over a two-year period will capitalize on the original investment. A 40% addition to the present $11,400,000 will result in a 100% growth in research capability and productivity. Maintaining the staus quo will halt the momentum gained by the HNRC over the last three years and will minimize the existing investment in facilities, operating funds, and scientific talent. An additional investment will provide advanced technologies presently not available to HNRC researchers e.g., gas chromatography-mass spectrometry and neutron activation whole body counting, to investigate the nutritional components of conditions of aging such as osteoporosis, cataracts, senile dementia, atherosclerosis and hypertension. These degenerative conditions account for billions of dollars of health care cost and lost productivity resulting from disability. The health and quality of life of every American can benefit from HNRC research if the necessary budget support is provided over the next two years.

HNRC FY '86 Budget

Program Area	Budget	% Utilization
Laboratory Research	$3,527,000	66
Metabolic Research Unit	2,564,000	50
Laboratory Animal Medicine	346,000	40
Biostatistics and Scientific Computing	451,000	--
Facility Operations	2,999,000	--
Administration	417,000	--
USDA-ARS Overhead	1,096,000	
TOTAL	11,400,000	55

USDA HUMAN NUTRITION RESEARCH CENTER ON AGING AT TUFTS UNIVERSITY • FISCAL YEAR 1986



Recreation	14
Volunteers	13
Volunteers	12
Living	11
Mechanical	10
Scientific Computing and Administration	9
Human Studies	8
Labs	7
Labs	6
Labs	5
Animal	4
Animal	3
Storage	2
Auditorium	M
Lobby	
Basement	

Metabolic Research Unit
Levels 14, 13, 12, 11, & 8
Budget: $2,564,000
Utilization: 50%

Facility Operations
Levels 10, 2, & 1
Budget: $2,999,000

Biostatistics & Scientific Computing
Level 9
Budget: $451,000

Administration
Level 9
Budget: $417,000

Laboratory Research
Levels 7, 6, & 5
Budget: $3,527,000
Utilization: 66%

Lab Animal Medicine
Levels 4 & 3
Budget: $346,000
Utilization: 40%

USDA-ARS
OVERHEAD: $ 1,096,000

TOTAL BUDGET: $11,400,000

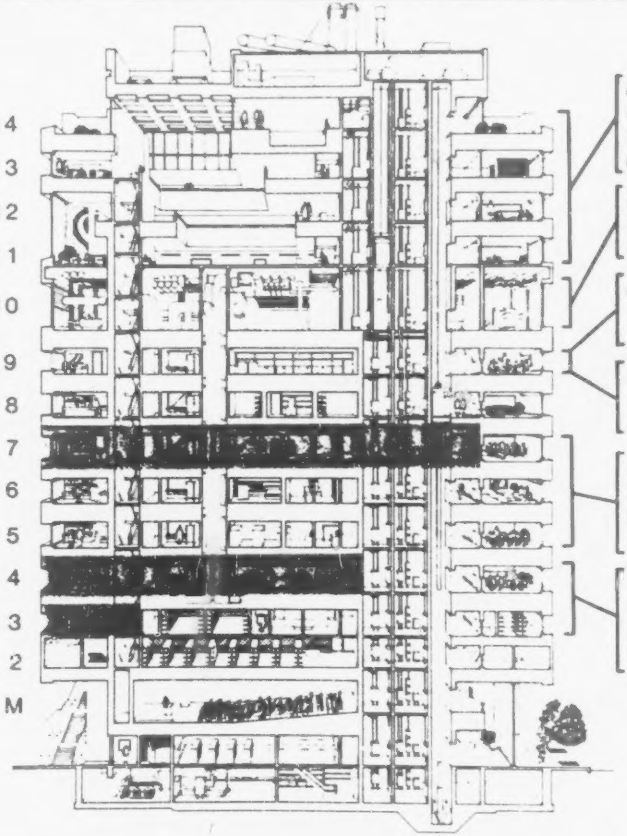
UTILIZATION: 55%

CAPACITY NOT UTILIZED ▨

HNRC FY '87 Budget

Program Area	New Program Initiatives	Total Budget	Percent Utilization
Laboratory Research	$ 790,000	$4,317,000	70
Metabolic Research Unit	1,150,000	3,714,000	100
Laboratory Animal Medicine	150,000	496,000	50
Biostatistics and Scientific Computing	50,000	501,000	--
Facility Operations	300,000	3,299,000	--
Administration	30,000	447,000	--
USDA-ARS Overhead	130,000	1,226,000	
TOTAL	2,600,000	14,000,000	76

USDA HUMAN NUTRITION RESEARCH CENTER ON AGING AT TUFTS UNIVERSITY • FISCAL YEAR 1987


Recreation 14
Volunteers 13
Volunteers 12
Living 11
Mechanical 10
Scientific Computing and Administration 9
Human Studies 8
Labs 7
Labs 6
Labs 5
Animal 4
Animal 3
Storage 2
Auditorium M
Lobby
Basement

Metabolic Research Unit
Levels 14, 13, 12, 11, & 8
Budget: $3,714,000
Utilization: 100%

Facility Operations
Levels 10, 2, & 1
Budget: $3,299,000

Biostatistics & Scientific Computing
Level 9
Budget: $501,000

Administration
Level 9
Budget: $447,000

Laboratory Research
Levels 7, 6, & 5
Budget: $4,317,000
Utilization: 70%

Lab Animal Medicine
Levels 4 & 3
Budget: $496,000
Utilization: 50%

USDA-ARS
OVERHEAD: $ 1,226,000

TOTAL BUDGET: $14,000,000

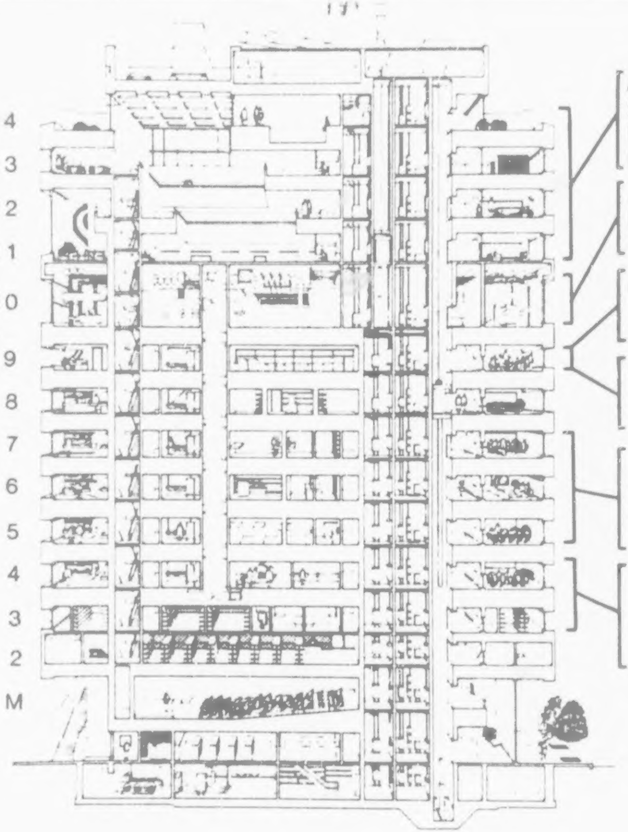
UTILIZATION: 76%

CAPACITY NOT UTILIZED ▨

HNRC FY '88 Budget

Program Area	New Program Iniitatives	Total Budget	Percent Utilization
Laboratory Research	$1,000,000	5,317,000	100
Metabolic Research Unit	280,000	3,994,000	100
Laboratory Animal Medicine	240,000	736,000	100
Biostatistics and Scientific Computing	50,000	551,000	--
Facility Operations	300,000	3,599,000	--
Administration	30,000	477,000	--
USDA-ARS Overhead	100,000	1,326,000	
TOTAL	2,000,000	16,000,000	100

USDA HUMAN NUTRITION RESEARCH CENTER ON AGING AT TUFTS UNIVERSITY • FISCAL YEAR 1988


Recreation 14
Volunteers 13
Volunteers 12
Living 11
Mechanical 10
Scientific Computing and Administration 9
Human Studies 8
Labs 7
Labs 6
Labs 5
Animal 4
Animal 3
Storage 2
Auditorium M
Lobby
Basement

Metabolic Research Unit
Levels 14, 13, 12, 11, & 8
Budget: $3,994,000
Utilization: 100%

Facility Operations
Levels 10, 2, & 1
Budget: $3,599,000

Biostatistics & Scientific Computing
Level 9
Budget: $551,000

Administration
Level 9
Budget: $477,000

Laboratory Research
Levels 7, 6, & 5
Budget: $5,317,000
Utilization: 100%

Lab Animal Medicine
Levels 4 & 3
Budget: $736,000
Utilization: 100%

USDA-ARS
OVERHEAD: $1,326,000

TOTAL BUDGET: $16,000,000

UTILIZATION: 100%

CAPACITY NOT UTILIZED ■

WEDNESDAY, APRIL 16, 1986

MARINE SHRIMP INDUSTRY

WITNESS

DR. THOMAS D. McILWAIN, GULF COAST RESEARCH LABORATORY

Mrs. SMITH. We will now hear from Dr. Thomas McIlwain.

As with all the witnesses, we will file your complete statement. And you can summarize or proceed as you wish.

Mr. McILWAIN. Thank you, Madame Chairwoman.

On behalf of the Gulf Coast Laboratory Consortium Research Laboratory, which is located in Ocean Springs Mississippi, the Oceanic Institute in Hawaii, and Tufts University in Boston, Massachusetts, I wish to thank you for your support in the past of our national shrimp culture program. I will present a brief summary of my written testimony.

A profitable domestic shrimp culture industry Friday in the United States depends on the American shrimp farmer being able to compete in the world market. They can do not so without a concerted action program which applies advanced technology and managers many strategies to offset both operating costs and meet strict environmental regulations and controls.

The $1.4 billion annual deficit in imported marine shrimp indicates that a more expedient vehicle, coupling a business and marketing perspective with scientific and technology expertise is required if the industry is to reach its full economic potential.

The Consortium combines considerable expertise and skills of the Gulf Coast Research Laboratory, Tufts University, and the Oceanic Institute. The program's long-range target is to substantially reduce this marine shrimp trade imbalance by achieving the aforementioned objective of producing shrimp on shrimp farms in the United States.

Industry constraints have been identified, research directions and objectives have been set. This has been done in consort with the industry as well as the research and academic communities.

The Consortium program is directed toward industry development rather than pure academic research. What we need to know for industry development is how to grow shrimp cheaply and sell them profitably to the people, who need it most, the shrimp farmers. These are needs that the Consortium is dealing with through the collective efforts of private, commercial, and governmental and university communities.

Balancing short-and long-term benefits and capitalizing on existing public and private expertise, the Consortium efforts surmounts academic, commercial, and governmental barriers to address industry constraints directly.

In terms of production technology, the Consortium's work is directed to high priority practical opportunities to increase yields, extend effective growing periods on to prevent or treat disease and ensure adequate supplies of quality seed stock at reasonable prices to our shrimp farming industry.

Strategies for the market, management or technical, are only as good as the strategists. From the beginning the Consortium is planned to include the highest caliber institutes and staff in this cooperative effort. During the fast few months cooperative research agreements have been developed with the Marine Shrimp Program at Texas A&M University, division of marine resources, State of South Carolina, and with Amorient Aquaculture International in Hawaii. The Consortium is now working to develop additional cooperative agreements with other industries who are involved in shrimp research.

In FY-87 critical lines of research will be continued with the help of all of the Consortium partners. In addition, we will begin contracting and operating high tech, low cost hybrid production models of prototype systems. These will incorporate applicable methods of semi intensive, and highly intensive technologies where necessary according to reasonably specific supply service and market infrastructures.

We know American shrimp farmers are currently serving specialty markets and have had some successes. Efforts of this consortium can extend this success to larger markets and hasten the development of shrimp farming as a viable and profitable industry in the United States.

We urge the Committee to continue to support our efforts. Therefore, we request $2.6 million for FY-86 for the operation of the Consortium's commercial development plan.

Mr. Chairman, I would also like to offer for the record a statement by Mr. Rollins, who is the President of the Oceanographic Institute in Hawaii, one of the cooperating partners in this. And I would like to submit that for the record.

I thank you for the opportunity to be here today. And I would be more than happy to answer any questions.

Mr. WHITTEN (Reassuming the Chair). Thank you very much for your appearance, Doctor. This Committee has been very much interested in the growth of the fishery business and we have kept very close to it. Last year we provided $1,350,000. Often the Committee has had to add money where the Office of Budget Management had not requested the funds.

We have a very tough situation now. The Office of Budget and Management has reduced the appropriation for the Department of Agriculture by about $9 billion. USDA has been cut more than any other part of the government.

Why it is, I do not know. We will have to do the best we can. This Committee is very proud of having sponsored the fishery program.

May I say that about two years ago I believe fish grown in Mississippi were brought up here by the Secretary of Agriculture, and they were served at the White House. And the meal just took over the crowd. So we are proud of that.

We do have the problem, as you know Congress has imposed an overall spending ceiling. It came along later and provided the Gramm-Rudman bill which cut funds still further. So we have our hands full providing any increases because we have got so many cuts that need to be restored.

So we believe in research on fish and will have to see what we can do because circumstances are now rather difficult. We have been good friends through the years, we have been mighty good friends. We are glad to have you here. What we can do about it I do not know.

Mr. McIlwain. I appreciate your support.

[The statement of Dr. Thomas McIlwain follows:]

Statement of Dr. Thomas McIlwain
Gulf Coast Research Laboratory
Ocean Springs, Mississippi
before the
Subcommittee on Agriculture, Rural Development and Related Agencies
Committee on Appropriations
U.S. House of Representatives
10:00 a.m.
16 April 1986

Mr. Chairman and Members of the Subcommittee, on behalf of the Gulf Coast Research Laboratory Consortium, I wish to thank you for your support of the Consortium's U.S. Marine Shrimp Program. It is a pleasure to have the opportunity to again appear before you to present positive testimony on this project. In recent years, the fastest growing segment of our food-producing community - aquaculture - has become of critical importance to our economy. This is particularly true in the production of marine shrimp.

A profitable domestic marine shrimp culture industry in the United States depends on American shrimp farmers being able to compete successfully with foreign imports. They cannot do so without a concerted action program which develops and applies advanced technology and management strategies to offset both operating costs and meet strict environmental regulations and controls. The one billion dollar plus annual deficit in imported marine shrimp indicates that a more expedient vehicle, coupling a business and marketing perspective with scientific and technological expertise, is required if the industry is to reach its full economic potential. Without stringent and coordinated effort, the industry may lose ground rather than gain it.

In FY86, 1.3 million dollars was appropriated for the Gulf Coast Research Laboratory Consortium to continue development of a U.S. Marine Shrimp Farming Industry. The Consortium combines the considerable experience and skills of the Gulf Coast Research Laboratory, Tufts University, and the Oceanic Institute. The program's long-range target is to substantially reduce this marine shrimp trade imbalance by achieving the aforementioned objective. Industry constraints have been identified, and research directions and objectives have been set. The Consortium's goals are not that different from those taught in Business 101 - - reduce risk and increase profit. The approach of the Consortium, however, makes it almost certain that this goal will be achieved - - and that was not taught in Business 101.

The Consortium program is directed to industry development rather than pure academic research. Thanks to numerous colleagues who have and are conducting thorough aquacultural investigations, we know shrimp can be bred and grown in captivity. What we need to know for the industry development is how to grow them cheaply and sell them profitably; we need to identify markets and marketing strategies; and we need to communicate research and marketing information to the people who need it most - - the shrimp farmers and potential shrimp farmers. These are needs that the Consortium is dealing with through the collective efforts of private, commercial, governmental and university communities.

By balancing short- and long-term benefits and capitalizing on existing public and private expertise, the Consortium effort surmounts academic, commercial, and governmental barriers to address industry constraints directly. And, rather than dilute the concentration of the program's focus, investigations are centering on a few selected high probability shrimp species and production systems.

In terms of production technology, the Consortium's work is directed to high priority, practical opportunities to increase yields, extend effective growing periods, to prevent or treat disease, and insure adequate supplies of quality seed stock at reasonable prices. In terms of business management, the Consortium is developing methods to overcome perceived weaknesses in management, marketing, and business development.

Strategies, whether marketing, management, or technical, are only as good as the strategists. From the beginning, the Consortium has planned to include the highest calibre institutions and staff in this cooperative effort. During the past few months, cooperative research agreements have been developed with the Marine Shrimp Program of Texas A&M, with the Division of Marine Resources, State of South Carolina, and with Amorient Aquaculture International. The Consortium is now working to develop additional cooperative agreements with the State of Hawaii, the University of Hawaii, and the University of Arizona.

In FY87, critical lines of research will be continued with the help of all the Consortium partners. In addition, we will begin constructing and operating high-tech, low-cost hybrid production models or prototype systems. These will incorporate applicable methods of semi-intensive, intensive or highly intensive technologies where necessary according to regionally-specific supply, service and marketing infrastructures.

We know that American shrimp farmers serving specialty markets are having some success. The efforts of this Consortium can extend this success to larger markets and hasten the development of shrimp farming as a viable and profitable domestic business.

We urge the committee to continue its support for the expansion and acceleration of this industry development effort which has major potential for the United States economy.

Therefore, we ask for a supplemental appropriation of $800,000 in FY 86, and for FY 87, we request $2.6 million for the operation of the Consortium's commercial development plan.

Thank you for the opportunity to appear here before you today. I will be happy to answer any questions.

Mr. WHITTEN. I would like to introduce the young people here today representing the 4-H Club. Please stand. The young man is from my hometown.

The Office of Budget Management has asked that we cut out funds for the 4-H Clubs. I think they should have their head examined. We are glad to have all of you here today.

I am very proud of my background in 4-H. And I got many awards, not for how well I did then, but how we have looked after the 4-H Club program up here. We are glad to have you.

WEDNESDAY, APRIL 16, 1986.

AGRICULTURE BUDGET FOR 1987

WITNESSES

RAY M. HOUSLEY, WASHINGTON REPRESENTATIVE, SOCIETY FOR RANGE MANAGEMENT

PETER V. JACKSON, III, EXECUTIVE VICE PRESIDENT, SOCIETY FOR RANGE MANAGEMENT

Mr. WHITTEN. Next, we come to Mr. Ray M. Housley, Society of Range Management.

Mr. HOUSLEY. Thank you, Mr. Chairman, thank you.

I would like to present my associate, who is also my boss, Pete Jackson, the executive vice president of the Society for Range Management.

Mr. WHITTEN. We will be glad to hear from you, sir.

Mr. HOUSLEY. He is here this week from Denver.

I regret that the 4-H people left because I wanted to begin by commenting on the budget proposal of the extension service today. We will in fact comment briefly on the budget proposals for six agriculture agencies and just highlight the brief statement that has been submitted.

Mr. Chairman, the Society for Range Management is concerned that the overall adverse impact of the 1987 budget proposal on natural resources program extension service request like others will exact a price of basic resource values on which the Nation's future security will rest in large measure. The 59 percent reduction in the Extension Services Program as proposed would eliminate all together the $2 and a half million line item for funding the renewable Natural Resources Education Act. This would seriously weaken the Service's ability to redeem its basic mission.

The proposed reduction of both staffing and funding for the Extension Service would inevitably impact the quality of accomplishment and the Foods Security Act conservation reserve sod buster and swamp buster provisions.

This Society recommends funding, Mr. Chairman, of the Renewable Resources Education Act at the 1986, level and funding of the Smith Lever program is at a level which will provide for a strong extension service role, and implementing the Food Security Act without crippling the agency's ability to meet its statutory mission and extension.

We recommend that specific provision be made to maintain staffing levels which will enable continuation of conservation extension activities funded by the Congress.

Turning to the Soil Conservation Service, the Society for Range Management supports the 1987 budget request for the Soil Conservation Service for conservation line items which would increase or remain the same as the 1986 enacted level.

A major question remains to be answered as to the adequacy of the technical assistance program item to support the SCS role in implementing the conservation reserve program. It seems essential that this item be increased by at least the amount of proposed reductions in other items in order to implement the key conservation provision of the Food Security Act while maintaining the ongoing conservation programs which this Society and this Committee has long supported.

Maintaining a strong capability and technical assistance is essential to meet the increased demand which will come with the activation of the compliance provision of the Food Security Act in the years through 1980.

A major problem in the budget proposal for the SCS lies in the massive reduction in personnel ceilings amounting to approximately 3700 full-time equivalents. Not only would such a reduction make acceptable implementation of the Food Security Act's conservation provisions unlikely, but inevitably trigger inefficient and costly reductions in force training the technical expertise that has been built up over long years.

This Society believes that ceilings cannot in good conscience be reduced in the face of conservation reserve and conservation compliance needs. Reductions must be made overall. We recommend that direction be given mandating a more reasoned and gradual approach.

This problem would be intensified by the proposed elimination of the ABP program, which would in effect eliminate an additional 278 staff years.

Briefly commenting on the Agricultural Research Service budget proposal, our Society's members are gratified that the ARS budget proposal calls for a modest increase despite the fact that that increase does not affect range and pasture management or forest development. We consider this of essential importance.

We view research expenditures as investments in the future of wise land use. And these investments must be made many years before the results can or need to be applied on the ground.

For example, a major western range problem with growing economic impact is the spread of pest plants or noxious weeds such as knapweeds and leafy spurge. Biological control measures offer a promise for ultimate control of these pests, and therefore our Society urges that additional investments be made in biological control research.

The Agency request should be increased by $500,000, and that should be done without shifting funds from other ongoing work. That approach would almost certainly be disruptive and counterproductive.

For the Cooperative State Research Service the Society for Range Management strongly recommends funding for range research grants under Subtitle M, Public Law 9798 at the same level provided in the fiscal year '86 continuing resolution. While the half million dollars program seems modest in the face of needs for both basic and applied research and range management and related areas, this competitive grant program has been very effective. And we feel it should be continued.

The Animal and Plant Health Inspection Service—although the Congress acted to transfer responsibility for the animal damage control program from Interior to the Department of Agriculture—the budget proposal for APHIS would provide less than half the amount appropriated to Interior for that same program.

The Society for Range Management recommends that APHIS be funded at approximately the same level as appropriated for animal damage control in fiscal year 1986. Failure to provide this level of financing will assure failure of the program, which must provide for both action and research in an area of critical concern for producers, land managers, and conservationists.

The Society also recommends continued funding at the current level for noxious weed control along with continuation of the biological control program which holds promise for dealings with leafy spurge and other major range plant pests in the western states.

Finally, the Agricultural Stablilization and Conservation Service, the Society for Range Management is unable to support the ASCS budget proposal to eliminate funding for the ACP in fiscal year 1987. We recommend funding for the agriculture conservation program at the 1986 enacted level to assure continuation of an effective and valuable force for resource conservation.

While not directly related to range management, we would observe that the forestry incentive and water bank programs have proven their worth and should be restored to the 1986 enacted level.

Mr. WHITTEN. Thank you very much. We appreciate your support. I just looked at the tables, and it just unbelievable to me. We have got before us now a supplemental appropriation involving $100 million for foreign programs. In the last two years we have had tremendous decreases requested in domestic programs and $36 to $38 billion added in overseas expenditures, including a military carryover. It is unbelievable.

The budget submitted for agriculture this year provides for eliminating programs totaling $4,600,000,000; reducing programs totaling $2,318,000,000; adopting user fees, which they cannot even get anybody to introduce the legislation, totaling $534 million and recisions of prior year funds totaling $1,056,000,000.

While OMB is doing that, it provides great increases in unspent funds for military carryover from $244 billion this year to $299 billion next year.

The proposal before us on the Nicaragua situation, where something needs to be done, calls for an additional $100 million. And the way it came to us was with no restrictions, no control, no statement about what it would be used for.

At the same time, the head of the Office of Budget and Management has written me objecting to all those things in the pending supplemental for our own country. I do not know, I do not see how that could happen. I wrote him back and told him I would be glad to talk to him about any item involved.

Yesterday, I heard some of my good friends talking about "pork barrel" and this and that. If the funds are for things in the U.S. it is identified as pork barrel. But anything for overseas purposes, nobody questions it. The last supplemental we had last year, there was criticism about a number of items for the domestic programs. But there was a $2,250,000,000 increase in foreign aid for a six week period. Nobody complained about that at all.

It is a tough situation we face. But all members on both sides on this Subcommittee have been for the farmer, for agriculture, because it is basic. So I anticipate we will restore these things.

We appreciate your support here, which will be helpful to us when we go to the floor.

Mr. HOUSLEY. Thank you, Mr. Chairman.

Mr. WHITTEN. Thank you, sir.

[The statement of Mr. Ray M. Housley follows:]

SOCIETY FOR RANGE MANAGEMENT

April 9, 1986

APPROPRIATIONS RECOMMENDATIONS - F.Y. 1987

EXTENSION SERVICE

The Society for Range Management is concerned at the overall adverse impact of the 1987 budget proposal on natural resources programs. The Extension Service request, like others, will exact a price of basic resource values on which the nation's future security will rest in large measure.

A 59% reduction in the Extension Service's program as proposed would eliminate altogether the $2,485,000 line item for funding the Renewable Resources Education Act. This would seriously weaken the Service's ability to redeem its basic mission. This comes at a time when farm and ranch families and landowners urgently need the advice and assistance provided by extension at the grass-roots level. Wise application of existing technology in range and pasture management can often turn an unprofitable enterprise into a profitable one.

The proposed reduction of both staffing and funding for the Extension Service would inevitably impact the quality of accomplishment under the Food Security Act's conservation reserve, sodbuster and swampbuster provisions. With added responsibilities in the face of reduced staffing and funding, extension workers cannot provide the kind and quality of assistance which will enable producers to make decisions based on adequate information. The result of these decisions will affect land use and basic resource values on millions of acres for years to come. Landowners should have no less than the best advice and information if the public interest is to be served.

This Society recommends funding of the Renewable Resources Education Act at the 1986 level and funding of the Smith-Lever programs at a level which will provide for a strong Extension Service role in implementing the Food Security Act - without crippling the agency's ability to meet its statutory mission in extension. That mission has long been effectively achieved through a three-way partnership - state, local and federal - for delivering USDA services. Devolvement of the federal role could so totally disrupt the delivery system as to make it totally unworkable.

We recommend that specific provision be made to maintain staffing levels which will enable continuation of conservation extension activities funded by the Congress.

SOCIETY FOR RANGE MANAGEMENT

April 9, 1986

APPROPRIATIONS RECOMMENDATIONS --F.Y. 1987

SOIL CONSERVATION SERVICE

The Society for Range Management supports the 1987 budget requests of the Soil Conservation Service for those Conservation Operations line items which would increase or remain the same as the 1986 "Enacted" level. A major question remains to be answered as to the adequacy of the Technical Assistance item to support the SCS role in implementing the Conservation Reserve Program. It seems essential that this item be increased by at least the amount of proposed reductions in other items in order to implement the key conservation provisions of the Food Security Act while maintaining the ongoing conservation programs which this Society has long supported. Maintaining a strong capability in Technical Assistance is essential to meet the increased demand which will come with the activation of the conservation compliance provisions of the Food Security Act in the years through 1990.

The Society also questions the proposed elimination of a highly effective program which has played a major role in maintaining and improving the productivity of the privately-owned rangeland resource. This is the Great Plains Conservation Program. We cannot recommend a reduction because the Food Security Act's program in no way substitutes for its range management activities.

A major problem in the budget proposal for SCS lies in the massive reduction in personnel ceiling amounting to approximately 3700 full-time equivalents. Not only would such a reduction make acceptable implementation of the Food Security Act's conservation provisions unlikely, but it would inevitably trigger inefficient and costly reductions-in-force, draining the cadre of technical expertise built up over long years. This Society believes that ceilings cannot, in good conscience, be reduced in the face of Conservation Reserve and Conservation Compliance needs. If overall reductions must be made, we recommend that direction be given mandating a more reasoned and gradual approach. This problem would be intensified by the proposed elimination of the ACP program, which would, in effect, eliminate an additional 275 ceilings.

SRM recommends continuation of the Rural Abandoned Mine Reclamation Program under funding transferred from the Department of the Interior.

SOCIETY FOR RANGE MANAGEMENT

April 9, 1986

APPROPRIATIONS RECOMMENDATIONS - F.Y. 1987

ANIMAL AND PLANT HEALTH INSPECTION SERVICE

Although Congress acted to transfer responsibility for the animal damage control program from the Department of the Interior to the Department of Agriculture, the budget proposal for APHIS would provide less than half the amount appropriated to Interior for the same program. The Society for Range Management recommends that APHIS be funded at approximately the same level as appropriated for animal damage control in F.Y. 1986. Failure to provide this level of financing will assure failure of the program, which must provide for both action and research in an area of critical concern for producers, land managers and conservationists.

SRM also recommends continued funding at the current level for noxious weed control, along with continuation of the biological control program which holds promise for dealing with leafy spurge and other major range plant pests in the western states.

SOCIETY FOR RANGE MANAGEMENT

April 9, 1986

APPROPRIATIONS RECOMMENDATIONS - F.Y. 1987

AGRICULTURAL RESEARCH SERVICE

Society for Range Management members are gratified that the Agricultural Research Service budget proposal calls for a modest increase despite the fact that increase does not affect range and pasture management or forage development, areas we consider of essential importance. We view research expenditures as investments in the future of wise land use; these investments must be made many years before the results can, or need to be applied on the ground.

For example, a major western range problem with growing economic impact is the spread of pest plants, or noxious weeds such as the knapweeds and leafy spurge. Biological control measures offer promise for ultimate control of these pests. Therefore, our Society urges that additional investments be made in biological control research; the agency request should be increased by $500,000, and that should be done without shifting funds or scientists from other ongoing work. That approach would almost certainly be disruptive and counterproductive.

SOCIETY FOR RANGE MANAGEMENT

April 9, 1986

APPROPRIATIONS RECOMMENDATIONS - F.Y. 1987

COOPERATIVE STATE RESEARCH SERVICE

The Society for Range Management strongly recommends funding for Rangeland Research Grants under Subtitle M, P.L. 97-98 at the same level provided in the F.Y. 1986 Continuing Resolution. While the $500,000 program seems modest in the face of needs for both basic and applied research in range management and related areas, this competitive grant program has been effective, and should be continued.

SOCIETY FOR RANGE MANAGEMENT

April 9, 1986

APPROPRIATIONS RECOMMENDATIONS - F.Y. 1987

AGRICULTURAL STABILIZATION AND CONSERVATION SERVICE

The Society for Range Management is unable to support the ASCS budget proposal to eliminate funding for the ACP in F.Y. 1987. We recommend funding for the Agriculture Conservation Program at the 1986 Enacted level to assure continuation of an effective and valuable force for resource conservation.

While not directly related to range management, the Forestry Incentives and Water Bank programs have proven their worth, and should be restored to the 1986 Enacted level.

WEDNESDAY, APRIL 16, 1986.

RURAL HOUSING PROGRAMS

WITNESS

HAROLD O. WILSON, HOUSING ASSISTANCE COUNCIL

Mr. WHITTEN. Mr. Harold Wilson.

We are running behind schedule and some of these statements are rather lengthy. They will all appear in the record. But we will be glad for you to touch on the high points.

Mr. WILSON. Thank you very much, Mr. Chairman.

I will make my comments brief today because I do have a full statement that we would appreciate you include in the record for us.

And at the outset, I would like to thank you very much and thank the Committee for your support of the rural housing programs through the Farmers Home Administration over the last few years. As you know, those programs have been beleaguered, and it has really been your Committee that has kept them in existence. And we appreciate that very, very much.

I also want to thank you for including an anti-deferral provision in the supplemental bill that I just mentioned that would restore $700 million in funding for this year for the Farmers Home Administration, single family and multi-family housing programs. As you know, in many states the program is already closed down because of the lack of funds this year. And your supplemental appropriation bill would restore those funds and open those programs back up again.

In addition, we would like to ask that you would add language in the appropriation bill that would restore the authorization levels of the 502 and 515 programs back to the FY-86 appropriation levels. As you know, in the budget reconciliation act there was a mix up. We assume in the numbers. And somehow that needs to be straightened out because 2 hundred million was added beyond the appropriation level to the 515 program and 190 million was eliminated from the 502 program.

And finally, Mr. Chairman, we would like to encourage the Committee to support this year a freeze level for FY-87 of the Farmers Home Administration housing programs. We feel the programs have already been cut enough. If the $700 million recision or deferral happens to stand this year, those programs will have received a 51 percent cut over their FY-85 levels. And we hope that you will at least hold to the FY-86 levels for next year.

We understand the Gramm-Rudman constraints and we understand the budget constraints that you are under. But there is still a tremendous need to house the poor in our rural areas. And the farmers home programs have demonstrated over the years that they can be effective in helping to meet that need.

And once again, I thank you for your support and encourage your support again for this year, Mr. Chairman. Thank you very much.

Mr. WHITTEN. Thank you very much. We are glad to have you.

Mrs. SMITH. Mr. Chairman, I would like to ask one question of Mr. Wilson.

Mr. WILSON. Yes.

Mrs. SMITH. The home builders in my state would like for us to change the rules for the 502 program and pool the low income and very low income funds. Now, in my state the very low income funds are not used, that is they are used only in part. So then they go back to Washington and they are pooled with other states.

I wondered how you would feel about this if we were to do it only on a basis of if the state wished to?

Mr. WILSON. Well, I think, Congresswoman Smith, that we would like to encourage the continued separation of the funds and would like to encourage the Farmers Home Administration to more aggressively implement methods to use the lower income 502 money. We feel that there are some things that the Farmers Home Administration could do that would allow those moneys to be used.

And we are concerned that even though the Administration has published in the past some recommendations relative to lowering costs to utilize those funds. And I am not familiar with your state, but in some areas the agency on the local level has not been aggressive about implementing those recommendations from the national office. And rather than seeing those funds lost to very low income people, I would like to encourage this Committee to encourage the Farmers Home Administration to implement cost saving measures.

We are dealing with a very limited pool of money right now. And if the pool of funds are limited, we would encourage those funds somehow be targeted to those who are most in need.

Mrs. SMITH. Let me just say I do not want to proceed long on this at all, Mr. Chairman, but we do have an excellent administrator of the Farmers Home Administration in Nebraska. And last year the average cost of the single-family units which were built was $31,000, which was very careful use of money.

Mr. WILSON. It certainly is.

Mrs. SMITH. I just saw you were an expert in this, and I wondered what you thought.

Mr. WILSON. Thank you very much. Thank you, Mr. Chairman.

[The statement of Harold O. Wilson follows:]

TESTIMONY OF
HAROLD O. WILSON
EXECUTIVE DIRECTOR
HOUSING ASSISTANCE COUNCIL

BEFORE THE

SUBCOMMITTEE ON

AGRICULTURE, RURAL DEVELOPMENT, AND RELATED AGENCIES

COMMITTEE ON APPROPRIATIONS

UNITED STATES HOUSE OF REPRESENTATIVES

April 16, 1986

Mr. Chairman and members of the Appropriations Subcommittee on Agriculture, Rural Development, and Related Agencies, I am Harold O. Wilson, Executive Director of the Housing Assistance Council. The Housing Assistance Council (HAC) is a national nonprofit housing organization which seeks to assist in the provision of housing for low-income families by providing technical assistance and seed money loan funds to rural development organizations. For 15 years, HAC has examined rural housing need and monitored the federal government's efforts to meet that need.

Mr. Chairman, over the past several years, the members of this Subcommittee have strongly supported the people of rural America. Each year, this Subcommittee has opposed those radical changes to the Farmers Home Administration (FmHA) rural housing program recommended by this Administration. Under your strong leadership, funds have been appropriated to continue those rural housing programs so necessary for the low income families throughout rural America.

As you know, the rural housing programs have more than absorbed their share of cuts over the past 3 years. The current FY'86 funding level of $2.3 billion represents a $1.15 billion reduction from the 1985 level. Gramm-Rudman took away an additional 4.3%, and the Administration is now proposing a deferral of $700 million. These reductions would bring the total cuts to 51.2% of the 1985 funding level.

I wish to thank the Chairman and Members of this Subcommittee for opposing the proposed deferral of rural housing funds, and I urge the continued support of the FmHA rural housing programs. As you know, the Administration's budget package would terminate the FmHA rural housing programs, transferring the responsibility, but not the funding, to HUD. If accepted, this nation will lose the very mechanism that, over the past half century, has produced over two (2) million units of decent housing for the citizens of rural America.

Mr. Chairman, we support the National Rural Housing Coalitions recommendations for FY'87 level of funding at the current FY'86 level.

Mr. Chairman, the FmHA rural housing programs are a vital resource for rural America. The assistance provided by the agency is irreplaceable. Actions, be they in the Authorizing, Appropriations, or Budget Committees, should only be taken after very careful analysis of the benefits this nation continues to received from these programs. We are not here today to advocate any sweeping increases in funds or dramatic new programs. We are here to request that this Subcommittee, when acting on the FY 1987 Agriculture Appropriation Bill, provide for FY 1987 the FY 1986 level of funds to permit the continuation of these essential programs.

The following points summarize our arguments in support of the continued existence of the FmHA rural housing programs:

i) Rural America continues to house a disproportionate share of our nation's poor. The 1980 Census identified 3.5 million poverty-level households in communities eligible for FmHA services. Rural poverty is getting worse; in 1983, the nonmetropolitan poverty rate was 18.3 percent, up sharply from 17.8 percent in 1982.

ii) Over 2.2 million units of rural housing in the FmHA service area are substandard.

iii) The need for comprehensive FmHA services continues unabated. In addition to the housing need, pollution of existing rural water systems has reached alarming proportions, and small farmers, as a class, are in desperate straits.

iv) The existing housing stock in rural areas is insufficient. Rural need cannot be met solely by local preservation efforts or by some modest and future voucher assistance program, because there is neither enough housing suitable for rehabilitation nor enough rental stock.

v) FmHA-financed housing is "bargain-priced". In 1984, existing units financed by FmHA cost 54.2 percent of the national median and new units financed by FmHA cost only 39 percent of the national average.

vi) The balanced FmHA homeownership/rental resources programs constitute a common sense approach toward meeting the housing need. For example, it costs less to subsidize those low-income families who can afford FmHA homeownership than to provide them with rental subsidies. On the other hand, the FmHA rental program permits the rental option for the poor communities which often have no decent rental housing stock.

vii) FmHA has a strong performance record.

viii) There is no viable decent housing alternative for the rural poor. A private housing credit delivery system for low-income families does not exist in rural America. With its 1,937 county, 270 district, and 46 state offices, FmHA has in place a delivery network well-suited to the peculiar problems associated with a dispersed population. No other agency possesses this type of delivery system.

ix) FmHA serves special rural populations with unique problems. Indians experience poverty compounded by land tenure issues which prevent any private housing from developing on reservations. Private sector financing mechanisms for land acquisition and subsequent housing and other development do not exist in Indian country. Only FmHA has a program specifically targeted for recovering lost lands within reservation boundaries.

The need for continued rural housing assistance is clear; and the need for continued FmHA housing assistance is obvious from a review of the Agency's achievements.

Over the past fifteen (15) years, this nation has witnessed dramatic progress in improving the quality of life for families in rural communities. While by no means eliminating poverty, substandard housing, or unemployment, FmHA assistance has provided many low-income people with an opportunity to achieve a better way of life. Over one million units of substandard housing in rural areas were replaced during the 1970s.

From 1970 to 1980, FmHA made over 1.2 million single family housing loans to rural families. Full implementation of the interest subsidy program during this period allowed service to low-income families unable to afford high mortgage rates. For the first time in their lives, these families had a chance at the American dream.

During the same period, FmHA made over 11,000 Section 515 loans, which produced 186,250 units of rental housing. In addition, 11,245 units of housing for migrant and seasonal farmworkers were produced. Rural low income families were further helped by the rental assistance program, which provided financial assistance to reduce the rental payments of qualified tenants.

FmHA and other federal resources were not adequate, however, to eliminate overcrowded, deficient housing occupied by low-income households, or affordability problems in rural areas.

In 1981, three-fifths of nonmetro very low-income households lived in housing defined by HUD as "having problems" - overcrowded, structurally deficient, and/or with high rent burden. The number and proportion of such housing increased since 1975, from 55.3 percent and 3.8 million households to 59.7 percent and 4.5 million households.

According to the Census, rural areas in 1980 contained 1.7 million occupied units which lacked plumbing or were overcrowded; i.e., which are deemed substandard by conventional measures. Within FmHA service areas, there are still 2.2 million units which are overcrowded or lack complete plumbing. According to more detailed data provided by the Annual Housing Survey, nearly a million rural substandard units were occupied by low-income households (with annual incomes of less than $9,000).

By HUD's criteria for structural quality - the most valid measures now in use - in 1981 there were 3.4 million occupied nonmetro units which were physically inadequate. (HUD has not published equivalent data for rural areas.) They constituted 13 percent of the nonmetro occupied housing. Of these, 1.4 million were severely inadequate.

Worst case households are those which are both poor and in inadequate housing. There were 1.9 million very low-income nonmetro households in inadequate housing as defined by HUD. One million were in severely deficient units. Twenty-two percent of the very low-income owners and 29% of the very low-income renters in nonmetro areas were in inadequate housing.

In addition, the Census reports 1.2 million rural households living in mobile homes manufactured before 1975; i.e., before a federal standard for mobile home safety and construction quality was implemented. More than half of the occupants of pre-standard mobile homes are low-income households.

These stark facts illustrate the continued need for new housing and housing rehabilitation.

TABLE I: Occupied Deficient Units in 1981

	Metro		Nonmetro	
	(Millions)	(% Total)	(Millions)	(% Total)
Total Occupied	56.7	100.0%	26.5	100.0%
Physically Inadequate	4.3	7.5%	3.4	13.0%
Severely Inadequate	1.5	2.7%	1.4	5.5%
Owners				
Occupied	34.8	100.0%	19.5	100.0%
Physically Inadequate	1.5	4.2%	2.0	10.1%
Severely Inadequate	.4	1.2%	.8	4.0%
Renters				
Occupied	22.0	100.0%	6.9	100.0%
Physically Inadequate	2.8	12.7%	1.5	21.2%
Severely Inadequate	1.1	5.1%	.7	9.6%

Inadequate Units Occupied by Very Low-Income Households

	Metro (Millions)	Metro (% Total)	Nonmetro (Millions)	Nonmetro (% Total)
Total Occupied	14.3	100.0%	7.5	100.0%
Physically Inadequate	2.0	14.2%	1.9	[illegible]
Severely Inadequate	.8	5.8%	1.0	13.8%
Owners	5.6	100.0%	4.4	100.0%
Physically Inadequate	.5	17.2%	1.0	22.0%
Severely Inadequate	.2	3.2%	.6	13.6%
Renters	8.8	100.0%	3.0	100.0%
Physically Inadequate	1.5	17.2%	.9	28.9%
Severely Inadequate	.7	7.5%	.5	15.5%

Source: Department of Housing and Urban Development, Office of Policy Development and Research, "Attaining the Housing Goal?", by Iredia Irby, July, 1984.

The composite figure for overcrowded as well as deficient units occupied by very low-income nonmetro households is 2.1 million units. Thus, by accepted standards for housing quality, there is a need for approximately 2 million new or upgraded units to house rural low-income households. Because nonmetro poverty has increased since these figures were reported (1980-81), it is likely that the current figure would be higher.

In 1981, nearly $15,000 was needed by a nonmetro family of four to meet annual living costs included in the "lower budget" established by the Bureau of Labor Statistics. In 1984, an estimated $17,000 was needed for nonmetro renter-occupied households, and $20,000 for owner-occupied households. (See appendices for details.) The lower budget assumes that less than a fourth of household income is spent on shelter.

Unfortunately, for nonmetro households of all incomes, gross rent as a percentage of income increased from 19% in 1970 to 25% in 1980; i.e., rents increased far faster than did income. Mobile home rent consumed a larger share (26%) of rural incomes. The mobile home rent burden was greatest for minorities and poverty-level households: 30% for rural black households, over 50% for poverty-level households, according to 1980 Census data.

The 1981 Annual Housing Survey reports that 2.6 million nonmetro households with incomes of less than $10,000 spent more than 35% on shelter costs. Most of these households earned less than $7,000. Over a million spent more than 60% of their incomes on housing. Over half of these had household incomes of under $3,000, and thus had less than $1,200 remaining with which to cover food, clothing, and other household expenses for the year. In the FmHA service areas alone, 1,309,312 tenant families have incomes of $9,999 or less and pay more than 35% of income for rent. Of these families, 831,592 (63.5%) have incomes of less than $5,000.

These households had fewer than four members, on the average. However, even using the Bureau of Labor Statistics (BLS) nonmetro lower living budget for retired couples, they would not have enough left after meeting shelter costs to afford basic expenses.

During December 1984, FmHA multifamily housing staff estimated that 138,750, or 44.8%, of the tenant households in Section 515 financed housing experienced a rent overburden.

Thus, in addition to poverty households now receiving assistance, as many as 2.6 million nonmetro households need assistance to cover shelter costs.

Rural needs include those of special populations for which remedies are difficult, even when government actively seeks to fund housing assistance. Migrant farmworkers are a case in point. A 1980 survey by the Interamerica Research Associates, under contract to the Farmers Home Administration, found that 750,000 new or substantially rehabilitated units for migrant farmworkers were needed.

On Indian reservations, there is an unmet housing gap of some 90,000 units, up from 63,000 in 1970. The private sector cannot and will not address this need.

Many low-income rural homeowners need assistance to improve their water and/or waste disposal facilities. According to a survey conducted by Cornell University for the U.S. Environmental Protection Agency, two thirds of rural households in 1982 had unacceptably contaminated water, with coliform bacteria the most common contaminant. The Census of Housing reports that in 1980 nearly 2 million rural households relied on dug (not drilled) wells and undefined sources of water.

Nearly 16 million relied on septic tanks or cesspools for sewage disposal. According to a recent Soil Conservation Service study, many of these were in areas deemed not suitable for septic fields, and thus contributed to water contamination. Undefined means of sewage disposal were used by 1.3 million rural households. One and a half million rural households had either no bathroom or only a "half bath."

Thus, the Census indicates at least two million rural households need upgraded water and waste disposal facilities. The EPA study indicates a far higher number, perhaps as many as 14 million households, need facilities to eliminate water pollution, particularly contamination by human waste.

The Administration's budget implies that rural housing needs will be financed by the private sector, but proposes that government assistance will be provided by the Department of Housing and Urban Development (HUD). There are serious, if not fatal, flaws in the proposal which would replace direct credit with a guaranteed lending system which has not previously worked in rural areas. A viable guaranteed housing program is dependent on credit institutions geared and able to function as mortgage lenders.

During 1984, there were more bank failures than in any year since 1938, and most of those failures were in rural areas. Traditionally conservative, rural banks have been increasingly constrained by farm loan delinquencies. According to a recent study by the Economic Research Service of USDA, banks in agricultural areas have been particularly vulnerable to failure and other financial setbacks in recent years. Banks with agricultural portfolios are a considerable rural credit resource: nearly 1,300 of the 8,000 nonmetro banks had over half of their loan funds in agriculture. The jeopardy in which these banks are placed encourages them to collect from delinquent borrowers, contributing to a level of farm and home sales, auctions, and foreclosures exceeding any since the Great Depression.

The availability of private credit means little to low income families, who require some form of subsidy to permit homeownership, and the HUD ownership programs which are to be continued in 1988 are not subsidized. Table IV illustrates the percentage of income required to carry a very modest mortgage, taxes and insurance.

TABLE II: Percentages of gross income required to carry principal, interest, taxes and insurance (PITI) for a modest home with a 30 year, 10.5 percent mortgage.

Mortgage	-	$40,000
Annual Payment	-	4,392
Taxes	-	400
Insurance	-	140
PITI	-	$4,932

INCOME	PERCENTAGE FOR PITI
$15,000	32.9%
13,500	36.5%
10,000	49.3%
8.500	58.0%
7,000	70.5%

The above data are not shelter costs. Utility and maintenance costs are not included.

We recently examined data developed by the National Association of Realtors on median priced existing housing sales and minimum qualifying income; additionally, we looked at average new home cost and income data developed by the National Association of Homebuilders. These data illustrate who homebuyers were since 1974. On the nex page, the 1983 data are contrasted to that of the FmHA 502 program:

Median price existing housing - $70,300
Average price new housing - $89,800
Average price FmHA housing - $37,743

There is ample evidence to conclude that sufficient housing credit is lacking in rural areas, and where that credit is available it serves a higher-income clientele. The need for credit and assistance for low- and very low-income households has already been documented. Therefore, termination of FmHA housing programs will effectively eliminate any possibility of adequate housing for several million rural families.

The problems facing rural tenants and the budget solutions proposed to meet these problems yield additional cause for concern. Under the budget rural areas presumably will be the planned beneficiaries of half of HUD's 97,500 assisted units, available beginning in 1988. Even this concession to rural need must be examined carefully and questioned. Because HUD plans to use housing vouchers as its future assisted housing program several questions must be asked: Are there enough suitable rental units available? Who will finance the new and replacement rental units needed in rural areas? If financed, will vouchers make new units affordable to low-income people?

HAC has long supported the FmHA rural housing programs. Since the 1960s these programs have been shaped to meet the unique requirements of rural America. The information and data indicate a continuing and unmet need for services for the rural poor. The Farmers Home Administration programs and delivery system are best equipped to deal with this need.

The Aministration's budget proposal leaves unanswered how the housing needs of the poor will be met. Even if private credit was universally available in rural areas, low- and very low-income families could not afford to use it. State and local housing finance efforts utilize tax-exempt offerings to reach families with incomes lower than those of families who can afford private credit, but these local programs do not serve the poor or the near poor, unless supplemented with deep federal subsidies. The expectations, associated with current budget proposals, that everyone would assume a fair share of the discomfort yielded by the cuts, is disingenuous at best. The budget proposals terminate the FmHA rural housing and community development programs, and in so doing, exacerbate an already impossible situation for the rural poor.

Shelter is not an expendable item that can be cut back or eliminated when times are difficult. It is an essential element required for the support of human life, an element that also has a direct bearing on the creative and productive potential of people. A proposal which would eliminate programs of assistance that have proven successful for years in raising the quality of life for the rural poor, but which at the same time offers no realistic alternatives, is questionable on both moral and economic grounds. It reflects a policy that is shortsighted at best.

Rather than being eliminated or cut beyond useful capacity, the FmHA programs should be reformed to assure their efficiency and increase their ability to serve the poor. The economic and social problems of rural communities call for creative solutions, not the burial of programs created to address exactly the problems we face in rural America today.

We urge the members of this Subcommittee to keep faith with the families of rural America. The budget proposals which would terminate the FmHA rural housing programs should be firmly rejected. We strongly endorse the current appropriation levels to ensure the preservation and continuation of the successful rural housing programs of the FmHA.

WEDNESDAY, APRIL 16, 1986.

COTTON GINNING RESEARCH

WITNESS

J. H. TONY PRICE, EXECUTIVE OFFICER, TEXAS COTTON GINNERS' ASSOCIATION

Mr. WHITTEN. We now come to Mr. J.H. Price, Texas Cotton Ginners' Association.

Mr. PRICE. Thank you.

Mr. WHITTEN. We will be glad to have your statement in the record, and you can just touch on the high points if you would.

Mr. PRICE. Thank you, Mr. Chairman.

My name is Tony Price, and I serve as executive officer of the Texas Cotton Ginners' Association headquartered in Dallas, Texas.

Our membership is comprised of gin businesses in Texas and New Mexico. And I will address the research funding of cotton ginning laboratories operated by the Department of Agriculture's Agricultural Research Service in Mesilla Park, New Mexico and Lubbock, Texas. As you know, they also have one at Stoneville, and I am not familiar with that.

Cotton ginning holds a unique position in the sequence of events that bring cotton from the farmer's field to the marketplace. No farm policy act of Congress or magic wand can make cotton marketable until it has been ginned.

If the ginning industry cannot advance its technology through research, many farmers can expect to lose quality discounts and higher processing costs. Those losses will offset some of the benefits expected under the recently enacted farm legislation.

The Mesilla Park Laboratory primary interest area is in California, Arizona, New Mexico, and El Paso Valley area. The Lubbock Laboratory conducts research primarily for the areas of Texas and Oklahoma where the harvest of the crop is done with mechanical strippers, a fourth of the cotton grown in the United States.

It is paramount to the cotton farmer's interest that gins be able to preserve maximum fiber quality at the lowest possible cost. The cost of ginning currently is a major item in the farmer's expenses for getting cotton to the market, about one-fourth of the farmer's cost is to get the ginning done.

Our industry believes that the key to maintaining a balance between production cost and processing cost is the improved efficiency of gins and to preserve maximum quality of fiber. This will produce two benefits to the farmers, increased efficiencies that will permit gins to maintain present charges without a steadily escalation of cost. And the second, preservation of quality will allow the farmer to realize maximum revenues for his cotton.

USDA agencies at Mesilla Park and Lubbock must upgrade their facilities to fulfill these quality goals. And I assume the same demand is at Stoneville, Mr. Chairman. In some areas research investigations must be expanded.

The present level of funding for these two installations at Lubbock and Mesilla Park is not adequate to permit the work we believe is necessary. The economic justification is in place. Work at Mesilla Park in moisture conditioning and drying seed cotton will add several dollars per bale to the farmer's revenue. At Lubbock projects to remove foreign matter from the cotton will help farmers realize $15 to $20 a bale or more on about 30 percent of that strip harvested crop.

We are not fully aware of individual project needs at the installations but we do believe that each of these laboratories will require about $500,000 additional fund in the next two years just to respond to the quality and efficiency needs of cotton farmers. These funds we believe will be the minimum that will upgrade facilities and allow the addition of 2 or 3 professional staffers to carry on the work.

We realize that it is difficult to justify increased funding in this era of deficit reduction. We also know first hand that funding at these two installations has declined in recent years to the point that research capabilities appear to be threatened. We also want to emphasize this, that cotton farmers will not receive full benefit from foreign legislation without a viable research program in the ginning industry.

We consider funding of the USDA ginning laboratories a protection of investment the federal government is making.

Mr. **Whitten**. You heard the statements about our problems. But we do hope we can take care of essentials. And research is one of them. Thank you very much.

Mr. **Price**. Thank you.

[The statement of Mr. J. H. Tony Price follows:]

Statement by J H Tony Price
Executive Vice President, Texas Cotton Ginners' Association
Dallas, Texas April 16, 1986
Before the House Subcommittee on Agriculture, Rural
Development and Related Agencies
Committee on Appropriations

Mr. Chairman, and members of the committee:

My name is Tony Price and I serve as executive officer of the Texas Cotton Ginners' Association headquartered in Dallas, Texas. Our membership is comprised of gin businesses in Texas and New Mexico and I will address the research funding of cotton ginning laboratories operated by the Department of Agriculture's Agricultural Research Service at Mesilla Park, New Mexico and Lubbock, Texas.

Cotton ginning holds a unique position in the sequence of events that bring cotton from the farmers' fields to the market place. No farm policy, Act of Congress or magic wand can make cotton marketable until it has been ginned. This is the processing step between the harvest of the crop and the selling of the bales that go through warehouses into the textile mills.

If the crop is large, gins normally prosper. If the crop is small, gins are the first to feel the effects of lost volume that leaves marginal operating revenues. There is no program in the current farm bill that offers any direct protection or benefit to the gins. Indirectly, I expect gins to benefit as the provisions of the current Act permit farmers to regain their markets and restore a healthy cotton economy.

In order to offer maximum efficiencies and economies to the cotton producers, gins must maintain processing capabilities and improve systems that retain fiber qualities. If the ginning industry cannot advance its technology through research, then many farmers can expect to lose in quality discounts and higher processing costs; and those losses will offset the benefits expected under the recently enacted farm legislation.

Much of the research we will need to maintain fiber quality and reduce the farmers' processing costs is carried out in the USDA ginning research laboratories at Mesilla Park, New Mexico; Lubbock, Texas; and Stoneville, Mississippi. The areas served by the New Mexico and Texas installations will produce over half the cotton crop in the United States this year.

The Mesilla Park laboratory primary interest is in the California, Arizona, New Mexico and El Paso Valley production area; and the Lubbock laboratory conducts research primarily for the areas of Texas and Oklahoma that harvest the crop with mechanical strippers -- roughly a fourth of the cotton grown in the United States.

(more)

While private industry has been spending three to four million dollars a year in basic research for ginning, the three USDA laboratories have been funded slightly above one million dollars. It is increasingly difficult for the private sector to devote additional dollars to basic research in view of the extremely depressed cotton gin market. With farmers in trouble, gins continue to go out of business because of increased operating costs and loss of volume from farmers going out of business.

However, it is paramount to the cotton farmers' interest that gins be able to preserve maximum fiber quality at the lowest possible cost. The cost of ginning currently is a major item in the farmers' expenses for getting his cotton to market. In stripper harvest areas like West Texas and Oklahoma, and parts of New Mexico, per bale ginning charges averaged $52.48 in West Texas, 51.85 in New Mexico, and 50.15 in Oklahoma in the 1984-85 season according to USDA ERS staff report on "Cotton Ginning Charges."

In Texas, Agricultural Extension economists estimate it costs $204.40 to grow a bale of dry land cotton in West Texas; so roughly 25% of the farmer's cost is in the ginning. The same holds true for the Oklahoma production area. The percentage is about the same for irrigated cotton in that area.

Our industry believes one key to maintaining a balance between production costs and processing costs is to improve the efficiency of gins and to preserve maximum quality of fiber that will produce two benefits for the farmer:

(1) Increased efficiencies will permit gins to maintain present charges without the steadily escalation of costs;

(2) Preservation of quality will allow the farmer to realize maximum revenues for his cotton.

Our Association maintains a close relationship with the research facilities, both private and those operated by USDA. The USDA agencies at Mesilla Park and Lubbock must upgrade their operations to fulfill these efficiency and quality goals. In some areas, research investigations must be expanded. The present level of funding for these two installations is not adequate to permit the work we believe is necessary.

The economic justification for adequate funding can be found in several current projects: At Mesilla Park, our industry knows that the investigations in moisture conditioning and drying seedcotton will add several dollars per bale to the farmers' income. At Lubbock, the projects to remove foreign matter from cotton can add $15 to $20 to the value of about 30% of the cotton grown in most of Texas and all of Oklahoma. These are only two examples of the economic benefits we expect from the work at these installations. We are talking about millions of dollars of benefits for hundreds of thousands of dollars of research investment.

Although we are not fully aware of individual project needs, our industry believes that each laboratory -- Mesilla Park and Lubbock -- will each require $500,000 additional funds in the next two years just to respond to the quality and efficiency needs of cotton farmers. These funds, we believe, will be the minimum that will upgrade facilities and allow the addition of two or three professional staff to carry on the work. We really are not talking about much expansion -- just the bare bones to achieve these very critical goals.

We realize that it is difficult to justify increased funding in this era of deficit-reduction. We also know, first hand, that funding at these two installations has declined in recent years to the point that research capabilities appear to be threatened. We also want to emphasiz: cotton farmers will not receive full benefits from farm legislaton without a viable research program in the ginning industry. We consider funding of the USDA ginning laboratories a protection of the investment the federal government is making the the new farm program. Thank you.

WEDNESDAY, APRIL 16, 1986.

FEDERAL CROP INSURANCE

WITNESS

BILLY G. RAY, FEDERAL CROP CORPORATION

Mr. WHITTEN. We turn now to Billy G. Ray, Federal Crop Corporation.

Mrs. SMITH. Mr. Chairman, may I introduce Bill to you and to the folks who are here.

You know, Billy Ray grew up in our home town of Chappell. And I have a long enough memory that I can remember when he was a bomber pilot over the Ploesti oil fields, and he was shot down. We did not know whether he was in this world or in the next world. But those good folks over there, they got him out, hid him under some hay in a wagon, and took care of him. And he still wears a back brace.

But I will tell you that he was a prisoner over there for a year. And when he speaks in our church as a layman speaking about God and faith, we know that he knows just what he is talking about.

Now, Bill has gotten such a record in Chappell as an insurance person, and such a fine record, that I did not know, Mr. Chairman, until I came to Congress that there were other communities that did not have crop insurance. Because everybody in our community has crop insurance, because Bill has taught us that we should have it.

When another county in my district thought they were just dying because they were hailed and they were not hailed quite enough to get the government disaster money, I said you have crop insurance? They said, no, we do not have crop insurance.

But I do want you to know, Mr. Chairman, that Bill Ray is one of the architects of the bill that we have now because he has come in several times and has testified before Ed Jones's Committee. And Bill and Ed are good friends.

And I just wanted you to know what a great record he has. He does not happen to belong to my political party, and neither do you, but he is one of my dearest and best friends.

Mr. WHITTEN. He cannot belong to all of them. With that introduction, we expect wonders from him.

Mr. RAY. Mr. Chairman, Congresswoman Smith, thank you very kindly for that introduction. And I thank you for the privilege of appearing here today to comment on Federal Crop Insurance.

I am especially pleased to appear before the popular and highly respected Congresswoman Smith, as she is the representative for the district from which I come. And we thank you very much for being our representative. We appreciate you.

Mr. WHITTEN. Mrs. Smith does a great job here. With all of the problems we have, she is a real strength when it comes to helping straighten them out. We count on her very much.

Mr. Ray. I am glad to hear you say that. Because we certainly do appreciate her in Nebraska. And I just read a poll the other day that she received 77 percent favorable comments, which——

Mr. Whitten. What was wrong with the other 23 per cent?

Mr. Ray. To establish some credibility in what I am going to say here today about crop insurance, I wish to relate to you that I spent my lifetime promoting, selling, and servicing Federal Crop Insurance. I started as one of two people who was assigned the task of establishing the Federal Crop Insurance program in Nebraska at the time that the first Federal Crop Insurance Act was passed in 1938. I have been an agent for the Federal Crop Insurance Corporation for 30 years.

I am a farmer, and I have had Federal Crop Insurance on my crops for 36 years. And I am also an FCIC master marketer and have been for the past two years. I have been an insurance agent licensed for 40 years.

Currently the Federal Crop Insurance is having problems. I know that you are very much aware of this. But they are solvable, and there are some bright spots.

And I would like to tell you of one of them. In Dawes county, which is our home county, we have 85 percent participation in Federal Crop Insurance. The first policies were written back in 1939 insuring wheat, which is a major crop. Some of the insureds now are third generation insureds. Though these farmers insured under and consider Federal Crop Insurance as a necessary and valuable part of their farming operation.

The banks and the businessmen support and advocate the use of Federal Crop Insurance. We have had severe crop losses in the past, and yet the local economy suffered very little thanks to the Federal Crop Insurance indemnity checks insured farmers have received. This is how Federal Crop Insurance should be used and accepted in every agriculture county. And with the 85 of 100 operating farmers insured, it has been very convenient for the Federal Crop Insurance Corporation.

For wheat for the period 1948 through 1984, that is 36 years, the loss ratio was 52 percent, which means that of every dollar premium paid, $.52 went to the farmer and 48 percent was retained by the Federal Crop Insurance Corporation. My experience has been that if farmers understand the insurance, the cost and benefits are fair and the services adequate, farmers will carry crop insurance year after year.

The concept of Federal Crop Insurance remains a great and important tool for the American farmer to use in maintaining financial stability in spite of crop disasters. The need and benefits are more important today than ever before because of the distressed financial condition of farmers. And financial institutions and agri-related businesses are now encouraging farmers to insure their crops.

But crop insurance does have problems today which are causing farmers to become dissatisfied to the point of canceling. And agents have been over loaded with responsibilities and constant changes to the point some have given up, and many others are now considering quitting.

These problems although great can be usefully and quickly remedied administratively by FCIC management. I wish to comment on a few of the important issues.

Actual production history, this plan was put in place by management for the current 1986 crop year makes it mandatory for insured farmers to produce production records or be canceled. While some farmers want to improve their costs and guarantees by improving their yield, a great majority of farmers detest this plan and many have canceled because of it. The APH plan is unbelievable, impossible to administer, will result in a substantial loss in the number of insured farmers, new sales, and should be abolished.

Number two, administration costs, premium volume, and lost ratios, since enactment of the 1980 FCIC Act, the Administration costs have risen from 79 million during 1981 to 199 million for 1985. That is an increase of 200 percent in the costs. Premium volume has increased only from 377 million to 440 million, or an increase of only 17 percent, while the loss ratio has increased from 98 percent to 128 percent.

This is not a good record. However, the intent of the 1980 FCIC Act can still be carried out successfully. To accomplish this we should return to the basics, the FCIC plan that was working very well in 1980 but lacked funding for expansion. Federal Crop Insurance Corporation should be restored as the controlling organization using its many years of good experience and dedicated and capable employees.

Number three, premium subsidy, premium subsidy was included in the 1980 FCIC Act to promote increased farmer participation. It is needed at this time for retention of current premium control and to assist farmers through their difficult economic struggle. It would be disastrous to the success of Federal Crop Insurance Corporation if the subsidy was withdrawn at this time.

Delivery systems, there are two, FCIC master marketers and reinsured private companies. And much of the problems that we have today and the poor performance is a result of the struggle between the two.

FCIC management and the private companies' goal has been to eliminate the Federal Crop Insurance Corporation and turn its operation over to private companies. This would eliminate master marketers and their agents. So they have been forced to spend much of their time fighting for survival.

Master marketers do not feel that the best interest of agriculture would be served if farmers lose the protection provided for so many years by the Federal Crop Insurance Corporation. The use of private companies to provide multi-peril crop insurance is in an experimental stage. And should it fail to succeed and the Federal Crop Insurance Corporation be eliminated as proposed, the protection now offered by the Federal Crop Insurance could be lost to the farmers forever.

Both systems are now in place, and both can contribute to increasing the participation of farmers. FCIC management should put equal emphasis on both systems to promote maximum participation and service. Many questions have been raised about the cost for each system, equal pay for the same services performed, loss adjusting, licensing and training of agents, services to farmers, and others that can only be proven by observation of performance.

FCIC management should be mandated to consider both systems as experimental and should make fair and accurate evaluations to learn the truth about the operation of each system. Surely the American farmers and all taxpayers should exact no less.

I believe the time has arrived whereby most people involved are aware that some of the changes are not working, that we should be using and improving the insurance plan that worked well in the past, that by working together all segments can be treated fairly and equally, Federal Crop Insurance will have real growth.

The attitude, the need, and the timing is perfect for this to happen. Farmers need Federal Crop Insurance more than ever before. They need your assistance to assure that it will always be available to give them the protection that they need.

I thank you very kindly, Mr. Chairman.

Mr. WHITTEN. Thank you very much.

I and other members of the Committee have worked through the years trying to get a farm crop insurance program that would work. We went through many years where we had it on an experimental basis. When half the counties qualified we thought it would no longer be experimental. We have had many, many problems.

There is a lot of dissatisfaction all over the country about the whole operation. Personally, I have not thought it worked as well, giving commissions to groups on the outside, as it did when we had somebody identified with agriculture.

But our purpose is to to have a good program. And your example is very helpful to us. Everything is not always handled perfectly however. It is often that way.

We appreciate your statement here. And I repeat again, Mrs. Smith does a great job.

Mr. RAY. Thank you very much. Thank you, Mrs. Smith.

Mrs. SMITH. Thank you, Bill. We are very proud you of you and appreciate you very much.

[The statement of Billy G. Ray follows:]

Statement of
Billy G. Ray
Chappell, Ne.
before the
House Agriculture Appropriations Committee
April 16, 1986

Mr. Chairman and members of the House Agriculture Appropriations Committee.

My name is Billy G. Ray of Chappell, Nebraska. I appreciate this privilege to testify before you in support of Federal Crop Insurance.

To establish credibility to what I say about Crop Insurance I wish to relate to you that I have spent my lifetime promoting, selling, and servicing Federal Crop Insurance. I started as one of two people assigned the task of establishing a crop insurance program in Nebraska when the Federal Crop Insurance Act of 1938 was enacted. I have been an agent for the Federal Crop Insurance Corporation for 30 years, an FCIC insured farmer for 36 years, and an FCIC Master Marketer for the past 2 years. I have been a private licensed insurance agent for 40 years.

Currently Federal Crop Insurance is having problems but they are solvable and there are some bright spots. I wish to tell you of one. In Deuel County Nebraska 85% of the operating farmers carry crop insurance. The first policies were written back in 1939 insuring wheat which is the major crop grown. Some are now third generation insureds. These farmer insureds understand and consider Federal Crop Insurance a necessary and valuable part of their operation. The banks and businessmen support and advocate the use of Federal Crop Insurance. We have had severe crop losses in past years, and yet the local economy suffered very little, thanks to the Federal Crop Insurance indemnity checks insured farmers received. This is how Federal Crop Insurance should be used and accepted in every agricultural county.

And with 85 of 100 operating farmers insuring, it has been very generous to the Federal Crop Insurance Corporation. For wheat for the period of 1948 thru 1984, 36 years, the loss ratio was 52%. This means that for every dollar of premium paid 52¢ was paid back to the farmer and 48¢ was retained by the Federal Crop Insurance Corporation. My experience has been that if farmers understand the insurance, the cost and benefits are fair, and the service is adequate, farmers will carry crop insurance year after year.

The concept of Federal Crop Insurance remains a great and important tool for the American farmer to use in maintaining financial stability in spite of crop disasters. The need and benefits are more important today then ever before because of the distressed financial condition of farmers. And financial institutions and agri-related businesses are now encouraging farmers to insure their crops.

But crop insurance does have problems today which are causing farmers to become dissatisfied to the point of cancelling and agents have been overloaded with responsibilities and constant changes to the point some have given up and many others are now considering quitting. These problems, although great, can be easily and quickly remedied administratively by FCIC Management.

I wish to comment on a few of the important issues

1. Actual Production History . This plan, put in place by management for the current 1986 crop year, makes it mandatory that insured farmers produce production records or be cancelled. While some farmers want to improve their costs and guarantees by proving their yield, the great majority of farmers detest this plan and many have cancelled because of it. It has created a workload for agents that is impossible. In some cases a single farmer, with the help of his agent, has had to prepare and sign over 200 forms to have crop insurance for 1986. This is ridiculous.

   The date for filing APH forms is April 15th and the final date for sales is also April 15th. This does not permit time for agents to make much needed new sales. With the APH plan an agent cannot give a farmer a quote on rate or coverage. The agent must tell the farmer to fill out the forms and come back in two weeks for his rate and coverage.

   The APH plan is unbelievable, impossible to administer, will result in a substantial loss in the number of insured farmers, curtails new sales, and should be abolished.

   Prior to the APH plan we had an Individual Yield Certification plan which permitted a farmer to prove his yield and improve his costs and coverage, but was not mandatory. The great majority of farmers chose not to keep records and accepted the rate and coverage provided by FCIC underwriters. This plan was fair to high producers, was liked by farmers, agents, and underwriters and should be readopted.

2. Administrative Costs, Premium Volume, and Loss Ratios.

   Since enactment of the 1980 FCIC Act the administrative costs have risen from 79 million during 1981 to 199 million for 1985, premium volume has increased only from 377 million to 440 million, while the loss ratio has increased from 98% to 128%. This is not a good record but the intent of the 1980 FCIC Act can still be carried out successfully. To accomplish this we should return to the basics, the FCIC plan that was working very well in 1980 but lacked funding for expansion. The Federal Crop Insurance Corporation should be restored as the controlling organization, using its many years of good experience and dedicated and capable employees.

3. Premium Subsidy - The premium subsidy was included in the 1980 FCIC Act to promote increased farmer participation. It is needed at this time for retention of current premium volume and to assist the farmers through their difficult economic struggle. It would be disastrous to the success of Federal Crop Insurance if the subsidy was withdrawn at this time.

4. Delivery systems - FCIC Master Marketers and Reinsured Private Companies.

   Much of the problem and poor performance is the result of the struggle between the two. FCIC Management and the private companies goal has been to eliminate the Federal Crop Insurance Corporation and turn its operation over to private companies. This would eliminate Master Marketers and their agents, so they have been forced to spend much time fighting for survival. Master Marketers do not feel that the best interest of agriculture will be served if farmers lose the protection provided for so many years by the Federal Crop Insurance Corporation. The use of private companies to provide multi-peril crop insurance is in an experimental stage and should it fail to succeed and the Federal Crop Insurance Corporation be eliminated as proposed, the protection now offered by the Federal Crop Insurance could be lost to farmers forever.

   Both systems are now in place and both can contribute to increasing the participation of farmers. FCIC Management should put equal emphasis on both systems to promote maximum participation and service.

   Many questions have been raised about the

> cost for each system, equal pay for the same services performed, loss adjusting, licensing and training of agents, services to farmers, and others that can only be proven by observations of performance. FCIC Management should be mandated to consider both systems as experimental and should make fair and accurate evaluations to learn the truth about the operation of each system.
>
> Surely the American farmers and all taxpayers should expect no less.

I believe the time has arrived whereby most people involved are aware that some of the changes are not working, that we should be using and improving the insurance plan that worked well in the past, and that by working together with all segments being treated fairly and equally, Federal Crop Insurance will have real growth. The attitude, the need, and the timing is perfect for this to happen.

Farmers need Federal Crop Insurance more than ever before. They need your assistance to assure that it will always be available to give them the protection they need.

WEDNESDAY, APRIL 16, 1986.

CONSERVATION, RURAL DEVELOPMENT AND EXTENSION

WITNESS

DENNY BARNES, PRESIDENT SOUTH DAKOTA ASSOCIATION OF CONSERVATION DISTRICTS

Mr. WHITTEN. Mr. Denny Barnes, South Dakota Association of Conservation Districts.

We will be glad to hear from you.

Mr. BARNES. Mr. Chairman and Congresswoman Smith, thank you for the opportunity to allow me to testify before you this morning.

I am a farmer and rancher from central South Dakota. And I also have the pleasure of serving as the president of the State Association of Conservation Districts.

I will try to be brief in the essence of time. You have my written statement. I tried to make a few points that times are tough out on the farm economically, and because of that we tend to forget our duties and skip on soil conservation.

And I do not feel that a time like this when economically we are hurting like we are out there, that it is a good time to let those established programs that are there to help the farmer and rancher conserve our Nation's most precious resources, soil, I do not believe this is a good time to cut those programs.

And I guess I have been told that, what is it, seven tenths of one percent of our budget goes to agriculture. When you cut out things like RC&D, ACP, those kinds of things, extention, why, I cannot say where that will help that much to balance our deficit. And I would just hope that you would help us in continuing these programs, try to help the farmers to conserve our valuable resources. And we are willing to do our share to help cut the deficit'

And thank you very much for your help.

Mr. WHITTEN. We appreciate your statement. And it is helpful to us when we go to the floor. I think more than 30 times we have had to restore the ACP program against the recommendation of the Bureau of the Budget. The entire country has an interest in the fertility of our soil and taking care of it.

This year we have had a particularly difficult time. The legislative committee recommended and passed a new conservation reserve program. It was their intention that it be in addition to existing conservation programs. But the Office of Budget and Management came along, as I knew they would, and tried to make this a substitute for the existing programs which have worked so well through the years.

I wrote some restrictions to keep the new program from taking over the old program, to put it back where it should be. Regardless, my purpose was to see that it was not used as an excuse to eliminate the regular programs.

We got a bill through the Congress, and the President signed it, saying that the new conservation reserve program could not be used to get rid of the existing programs. In the supplemental bill before us now, these restrictions were rewritten. I agreed to drop them in view of the fact that we had language in the earlier supplemental bill saying they could not use that to cut out the old programs.

Again, somebody may say why should the country take care of this fellow's land? He should remember that the present landowner is just a trustee for its protection during his lifetime and it must be maintained for the future. We are all interested in our land. If we let it go down the drain, we will wind up like China, or India, or some of these other countries.

We appreciate your testimony.

Mr. **Barnes**. You mention the conservation reserve. I feel it will be effective.

Mr. **Whitten**. Yesterday I talked to the National Association of Conservation Districts. On the podium there was $3 and I told them it was the smallest honorarium I ever received. I thought when I got through they might increase it. But, I never have charged anything for soil conservation speeches.

Thank you very much.

Mr. **Barnes**. Thank you very much.

[The statement of Mr. Denny Barnes follows:]

Chairman, Members of the Committee, I am Denny Barnes, a farmer and rancher from central South Dakota. I also have the pleasure of serving as President of the South Dakota Association of Conservation Districts, which represents the 69 conservation districts that cover all of the state of South Dakota.

I am here this morning to ask for your help in stopping the devastating proposed budget cuts for Conservation, Rural Development and Extension.

We in Conservation would be the first to agree that cutting our National Debt should be done, and done quickly. I can personally attest to the fact that a large debt can become the biggest obstacle to keeping any type of operation going. However, concerning my own operation I have to remember that there are many things I could do to improve my cash income in the short run that could put me out of business later. For example, I could sell all of my heifer calves and not keep any for replacements for my beef cow herd. That would improve my income for now, but what would I do when the cow herd became old and non-productive?

I could also stop spending cash for Soil Conservation measures and allow erosion to occur. This may or may not be as visible to me as an aging cow herd, but the end results would be the same. One winter's worth of wind erosion on bare soil can reduce productivity enough to make the difference between making a profit or having a loss.

Statement of Denny Barnes, Onida, SD presented to the House Appropriations Subcommittee on Agriculture, Rural Development and Related Agencies, April 16, 1986.

It is beyond my comprehension why it would be considered prudent to cut out programs the nature of Great Plains, RC&D ACP and make devastating cuts in the Soil Conservation Service and Extension at a time when Rural America's economy is suffering as it is now. There are farms and ranches in South Dakota that are being foreclosed on and filing bankruptcy that survived through the Depression Era of the 1930's. Although there may now be a light at the end of the tunnel because of lower interest rates and lower fue prices, we are still in a world of hurt economically in Rural America.

Why, at this time when thousands of farmers are losing their farms, and many thousands of other farmers are close to losing their farms, would anyone consider eliminating the established programs that were designed to help these farmers conserve our nations most valuable resource, its' soil?

I know that at a time such as now when the nation's problem is, what to do with it's excess supply of food, it is difficult to be concerned with keeping it's "food factory" in shape. But the "food factory" is different from our other factories in that once it is allowed to disintegrate it cannot be put back into operation when needed.

I have seen numerous examples in the last few years of disregard of our "food factory", our soil, as the smaller farmers get bigger or sell to bigger operators. More emphasis is placed on being efficient and less emphasis is placed on concern for our resources. Small fields are enlarged for bigger machinery so the amount of bare soil is larger, allowing for a better change of wind erosion to occur. Just a year ago I had a new neighbor do just that and he allowed enough wind erosion to occur to cover the bottom two wires of a three wire fence with soil.

Some might say that the conservation programs are not working, because we still have erosion. I say that the instability of agriculture is the reason conservation needs continued support.

A recent tree survey shows that 67% of our windbreaks in South Dakota are in need of renovation.

In 1966, the Soil Conservation Service had 280 people in South Dakota, in 1985 they had 206 people, and in 1986 they will go to 162, and if the proposed budget cuts go through they will have to drop to 136 people. This kind of cut is simply unacceptable and will not allow for a functional Conservation program.

The Great Plains Conservation Program is still needed in the great plains. It's unique ability to lock an operator into a 10 year program results in continuity on the unit.

The Resource Conservation and Development Program is so effective in Rural America because it gets local units of government to sit down together and plan what they want done and in what order they want it done and then find a way to do it.

The Extension program is needed now more than ever as they try to help Rural America through these very troubled times. The Extension Service has already been trimmed enough in South Dakota. It has been trimmed so much that only 3% of their budget goes for administration. Every 1% of budget cut they take will translate into one less person to help at the grass roots level.

I have been told that the portion of the federal budget that directly served agriculture is .7 of 1%. With a total budget of $1.2 trillion how could the cutting of these programs, which do so much good for the nation and rural America, do anything significant towards cutting the deficit?

We are willing to do our share in helping to relieve the deficit, but we want it to be an equal effort across the total picture, not just on a segment that is already suffering more than their share, such as Rural America.

WEDNESDAY, APRIL 16, 1986.

ANIMAL WELFARE INSPECTION

WITNESS

FRANKIE L. TRULL, EXECUTIVE DIRECTOR, NATIONAL ASSOCIATION FOR BIOMEDICAL RESEARCH

Mr. WHITTEN. Next we have Frankie L. Trull, National Association for Biomedical Research.

How do you do? We are glad to have you here.

Ms. TRULL. Thank you.

Mr. Chairman I am Frankie Trull, executive director of the National Association for Biomedical Research, an organization dedicated only to the scientific community's interest in the continued humane and responsible use of research animals to improve the health of people and animals.

NABR's institution members have joined with more than 100 other academic, scientific, animal welfare, and protection organizations in seeking adequate appropriations for effective enforcement of the Animal Welfare Act by the USDA Animal and Plant Health Inspection Service.

We estimate that $6,648,850 is the minimum amount requirement for the USDA in FY 1987 to carry out its mandated responsibilities under the Act as amended by Congress in December 1985. A copy of the letter to you, Mr. Chairman, signed by the many diverse organizations here and around the country was submitted to the Subcommittee. And I would like to ask that it perhaps could be included in the hearing record.

In the past the Subcommittee has recognized the importance of a national animal welfare inspection program. And NABR members appreciate your leadership and hope you will again continue to provide adequate funding for this critical program.

Congress as a whole reaffirmed the importance with which it holds a strong, consistent federal laboratory animal welfare program when it approved amendments to the Animal Welfare Act just four months ago. The amendments which become effective in December of 1986 significantly expand the Act. In USDA's role in its enforcement, for example, the statute now explicitly states that the Secretary of Agriculture shall inspect each research facility at least once a year. Prior to the 1985 amendments federal inspections were left to the Secretary's discretion.

In view of Congress's clear recent statement, as well as the repeated action of Appropriations Committees, it is incomprehensible that the Administration would suggest yet again the elimination of the animal welfare program. Research facilities are all too aware that federal budget restraints have never been greater. But zeroing this modest expenditure would be false economy. The amount is so small that eliminating it would have negligible impact on the federal deficit.

However, the effect on biomedical and behavioral research could be enormous. Research institutions are themselves investing considerable resources to comply with the Animal Welfare Act as amended. NABR is just beginning to collect hard data and does not yet have complete statitstics. But early survey returns suggest that the overall cost to research facilities for operation of institutional animal committees, increased responsibilities of animal care personnel, new and annual recordkeeping, all required by law, will easily be three to four times the cost of the federal inspection program.

The scientific community is shouldering the major share of that expense to implement additional uniform national standards for the care and use of laboratory animals. We are relying on the Federal Government's continued participation by conducting a high quality inspection effort to assure these standards are met.

Such assurance has been mandated by law and is expected by the general public. National public opinion polls conducted for the Foundation for Biomedical Research indicate that the vast majority of Americans support the use of animals in research and safety testing. At the same time the public is very concerned that animals which must be used are treated humanely.

The Animal Welfare Act was put in place 20 years ago to address this concern. And creating the act in with its periodic amendments, Congress has continually recognized the essential federal role in maintaing public confident in research.

It is impractical if not impossible for each state to duplicate this effort, as suggested by the Administration. Moreover, it would certainly be more costly. Inadequate funding of the APHIS inspection program could seriously impede research and ultimately jeopardize the future health and well-being of the nation. If faith and trust in the current enforcement program is lost, there will be increasing pressure to curtail or possibly eliminate use of animals in biomedical research and testing.

A preview of the chaos that could be created by elimination of the federal animal welfare inspection program will take place on April 24 of this year, next Thursday. Animal rights activists say have written to more than 40 research universities threatening major civil disobedience demonstrations on April 24 if the universities do not allow them unscheduled access to laboratory facilities to photograph research projects and animals. The so-called April 24 Coallition further demands negotiations to phase out the use of animals for research and teaching purposes.

Clearly the absence of a well-supported federal program in the opinion of animal rightists gives justification to any interested party no matter how unqualified to gain legal access to research laboratories for the purpose of, quote, inspection.

The scientific community and animal protection organizations do not always agree on how to balance animal welfare concerns and research needs without compromising either. We do agree that effective enforcement of the Animal Welfare Act is a critical element in achieving this goal. NABR therefore urges your support of FY-87 appropriations for animal welfare inspection programs of $6.6 million, the minimum amount necessary for enforcement of the Animal Welfare Act.

Thank you for the opportunity to appear before you.

Mr. WHITTEN. Thank you for being here. As you know, the Office of Management and Budget prepares the budgets. There is a man there for agricultural programs. You might have these folks write him. I have his name here. It might help us as well as you.

Ms. **Trull**. I would be happy too.

Mr. **Whitten**. We should not have to do that, but OMB wants to cut everything in sight. And then we have the Gramm-Rudman Bill, which automatically cuts further.

So you might wish to contact them. It might make it easier for us. Our problem is that we have got to get the Congress to approve whatever bill we bring out.

Ms. **Trull**. We will do our share. Thank you, Mr. Chairman.

Mr. **Whitten**. Thank you very much.

[The statement of Ms. Trull follows:]

NABR NATIONAL ASSOCIATION
FOR BIOMEDICAL RESEARCH

STATEMENT OF THE

NATIONAL ASSOCIATION FOR BIOMEDICAL RESEARCH

before the

U.S. HOUSE OF REPRESENTATIVES
COMMITTEE ON APPROPRIATIONS
AGRICULTURE, RURAL DEVELOPMENT AND
RELATED AGENCIES SUBCOMMITTEE

JAMIE L. WHITTEN, CHAIRMAN

Presented on April 16, 1986

by Frankie L. Trull
NABR Executive Director

The consolidation of the National Society for Medical Research and Association for Biomedical Research
818 Connecticut Avenue, N.W. • Suite 303 • Washington D.C. 20006 • (202)857-0540

The National Association for Biomedical Research was established in 1979 and consolidated in 1985 with the National Society for Medical Research.

NABR has institutional members only. They include more than 300 universities, medical and veterinary schools, teaching hospitals, academic and professional societies, pharmaceutical and other research-intensive companies. NABR members across the country are engaged in or directly interested in life-saving research, safety testing and education which of necessity requires the use of animals. All members are committed to the humane care and responsible use of these laboratory animals.

Mr. Chairman:

I am Frankie L. Trull, Executive Director of the National Association for Biomedical Research, an organization dedicated solely to the scientific community's interest in the continued humane and responsible use of research animals to improve the health of people and animals.

NABR's institutional members have joined with more than one hundred other academic, scientific, animal welfare and protection organizations in seeking adequate appropriations for effective enforcement of the Animal Welfare Act by the USDA Animal and Plant Health Inspection Service. We estimate that $6,648,850 is the minimum amount required for USDA/APHIS in FY 1987 to carry out its mandated responsibilities under the Act as amended by Congress in December, 1985. A copy of a letter to Chairman Whitten signed by the many, diverse organizations here and around the country who respectfully request that the Subcommittee once again protect this essential inspection program is attached to my written statement. I hope it can be included in the hearing record.

In the past, this Subcommittee has recognized the importance of a national animal welfare inspection program. NABR members appreciate your leadership and hope you will again act to continue adequate funding for this critical program.

Congress as a whole reaffirmed the importance with which it holds a strong, consistent federal laboratory animal welfare program when it approved amendments to the Animal Welfare Act just four months ago. The amendments, which became effective in December of 1986, significantly expand the Act and USDA's role in its enforcement. For example, the statute now explicitly states that the Secretary of Agriculture shall inspect each research facility at least once a year. Prior to the 1985 amendments, federal inspections were left to the Secretary's discretion. In view of Congress' clear, recent statement, as well as the repeated actions of Appropriations Committees, it is [redacted] incomprehensible that the Administration would suggest, yet again, [redacted] the elimination of the animal welfare inspection program.

Research facilities are all too aware that federal budget restraints have never been greater, but zeroing out this modest expenditure would be false economy. The USDA/APHIS animal welfare budget is so small that eliminating it would have negligible impact on the federal deficit. However, the effect on biomedical and behavioral research could be enormous.

Research institutions are themselves investing considerable resources to comply with the Animal Welfare Act as amended. NABR is just beginning to collect hard data and doesn't yet have complete statistics, but early survey returns suggest that the overall cost to research facilities for operation of institutional animal committees, increased responsibilities of animal care personnel, new annual reporting, recordkeeping and employee training -- all required by law -- will easily be three to four times the cost of the federal inspection program. The scientific community is shouldering the major share of the expense of implementing additional uniform national standards for the care and use of laboratory animals. We are relying on the federal government's continued participation by conducting a high quality inspection effort to assure these standards are met. Such assurance has been mandated by law and is expected by the general public.

National public opinion polls conducted for the Foundation for Biomedical Research indicate that the vast majority of Americans support the use of animals in research and safety testing. At the same time, the public is very concerned that animals which must be used are treated humanely. The Animal Welfare Act was put in place twenty years ago to address this concern. In creating the Act and with its periodic amendments, Congress has continually recognized the essential federal role in maintaining public confidence in research. It is impractical, if not impossible, for each state to duplicate this effort as suggested by the Administration. Moreover, it would certainly be more costly.

Inadequate funding of the APHIS inspection program could seriously impede research and, ultimately, jeopardize the future health and well-being of the nation. If faith and trust in the current enforcement program is lost, there will be increasing pressure to curtail or possibly eliminate the use of animal models in biomedical research and testing. A preview of the chaos that would be created by elimination of the federal animal welfare inspection program will take place on April 24th of this year. Animal rights activists have written to more than forty research universities threatening major civil disobedience demonstrations on April 24, if the universities don't allow them unscheduled access to laboratory facilities to photograph research projects and animals. The so-called April 24th Coalition further demands negotiations to phase-out the use of animals for research and teaching purposes. Clearly, the absence of a well-supported federal program, in the opinion of animal rightists, gives justification to any interested party, no matter how unqualified, to gain legal access to research laboratories for the purpose of "inspection".

The scientific community and animal protection organizations do not always agree on how to balance animal welfare concerns and research needs without compromising either. We do agree that effective enforcement of the Animal

Welfare Act is a critical element in achieving this goal. NABR, therefore, urges your support of FY 1987 appropriations for the USDA/APHIS animal welfare inspection program of $6,648,850 -- the minimum amount necessary for enforcement of the Animal Welfare Act.

Thank you for the opportunity to appear before the Subcommittee and for your consideration.

April 2, 1986

The Honorable Jamie L. Whitten
Chairman, House Appropriations
Subcommittee on Agriculture, Rural
  Development and Related Agencies
U.S. House of Representatives
2362 Rayburn House Office Building
Washington, DC 20515

Dear Mr. Whitten:

In the past you and the House Appropriations Committee have recognized the importance of continuing funding for the USDA Animal and Plant Health Inspection Service animal welfare program. As you know, animal protection organizations as well as the scientific community strongly support effective enforcement of the Animal Welfare Act. Your efforts to provide necessary resources to the agency charged with this responsibility are, therefore, very much appreciated.

In Fiscal Year 1985, the Department of Agriculture spent $5,898,850 to carry out its duties as prescribed by the Animal Welfare Act -- a comparatively modest sum in view of the significance of the national inspection program. Beyond the Department's current activities, in December 1985, Congress adopted amendments to the Act which require that a laboratory animal welfare information service be established at the National Agriculture Library in cooperation with the National Library of Medicine. It is conservatively estimated that $750,000 will be necessary to start the congressionally-mandated service in FY 87.

The undersigned organizations respectfully request that the Committee once again protect this essential inspection program and recommend appropriations of **$6,648,850 for FY 87** -- the minimum amount required to implement the Animal Welfare Act as recently amended. Your consideration will be most appreciated. Please contact Christine Stevens, Society for Animal Protective Legislation (202-337-2332), or Frankie Trull, National Association for Biomedical Research (202-857-0540), should you or your staff have questions or require additional information.

Sincerely,

American Academy of Otolaryngology Head and Neck Surgery
American Association for Thoracic Surgery
American Association of Chairman of Departments of Psychiatry
American Association of Directors of Psychiatric Residency Training
American College of Physicians
American Federation for Clinical Research
American Heart Association
American Humane Association
American Neurological Association
American Physiological Society
American Psychiatric Association
American Psychological Association
American Society of Hematology
American Society of Microbiology
American Society for the Prevention of Cruelty to Animals
American Veterinary Medical Association
Animal Care and Welfare/SPCA
Animal Protection Association
Animal Protection Association of America
Animal Protection Institute
Animal Rescue Foundation

More...

Animal Rescue League
Animal Welfare League
Anna L. Haas Humane Society of Cobb County
Atlanta Humane Society
Association for Academic Psychiatry
Association for Academic Surgery
Association of Academic Departments of Otolaryngology
Association of American Medical Colleges
Association of American Universities
Association of Medical Schools Departments of Biochemistry
Association of Medical Schools Pediatric Department Chairmen, Inc.
Association of Orthopedic Chairmen
Association of Professors of Medicine
Association of University Anesthetists
Association of University Professors of Opthalmology
Association of University Radiologists
Bismarck Humane Society
Black Hawk Humane Society
Bonneville County Humane Society
Boone County Humane Society
Broome County Humane Society
Citizens for Animal Welfare Education
Corinth Alcorn Humane Society
Federation of Humane Societies of Pennsylvania
Florida Federation of Humane Societies
Florida Humane Society
Forrest County Humane Society
Fund for Animals
Greenfield Area Animal Shelter
Gwinnett Humane Society
Halifax Humane Society of Volusia County
Humane Legislative Network
Humane Society for Animals
Humane Society in Tampa Bay
Humane Society of Bay County
Humane Society of Huron Valley
Humane Society of Seminole County, Inc.
Humane Society of the United States
Humane Society of Vero Beach
Humane Society of Warner Robins and Houston County
Iowa City Animal Shelter
Kentucky Humane Society
Lab Animal Magazine
Little Rock Department of Animal Control
Massachusetts Society for the Prevention of Cruelty to Animals
Michigan Federation of Humane Societies
Michigan Humane Society
Mississippi Animal Control and Protection Society
Mississippi Animal League
Missouri League for Humane Progress
Muscogee County Humane Society
Nashville Humane Society
National Alliance for Animal Legislation
National Association for Biomedical Research
National Association of State Universities and Land Grant Colleges
Oklahoma City Animal Control
Orlando Humane Society
Panhandle Animal Welfare Society
Panhandle Humane Society
Pharmaceutical Manufacturers Association
Progressive Animal Welfare Society
Pulaski County Humane Society
St. Charles Humane Society
Society for Animal Protective Legislation
Society for Neuroscience
Society of Academic Anesthesia Chairmen, Inc.

Society of Critical Care Medicine
Society of University Otolaryngologists
South Dakota Animal Welfare League
Stray Haven Animal Shelter
Surgical Infection Society
Tennessee Humane Association
Tippecanoe County Humane Society
University Association for Emergency Medicine
Webster County Humane Society
Western Pennsylvania Humane Society
Wisconsin Humane Society

WEDNESDAY, APRIL 16, 1986.

WITCHWEED ERADICATION PROGRAM

WITNESS

GEORGE SPAIN, DIRECTOR, PLANT INDUSTRY DIVISION, NORTH CAROLINA DEPARTMENT OF AGRICULTURE

Mr. WHITTEN. We now will hear from Mr. George Spain, North Carolina. I did not know anybody ever substituted for Commissioner Graham.

Mr. SPAIN. Mr. Chairman, I may do a very poor job of it.

With your permission, sir, he sent you a gift you might like, and you might just like to throw it away. It is a paperweight about the subject we are talking about.

Mr. WHITTEN. Thank you very much. Please give our regards to the Commissioner.

Mr. SPAIN. Yes, sir, thank you, sir.

Mr. Chairman and ladies and gentlemen of the Committee, my name is George Spain. I am the director of the Plant Industry Division in the North Carolina Department of Agriculture. I have presented a statement from Commissioner James A. Graham, Commissioner of Agriculture from North Carolina, who sends his regrets that he is not able to be here today. I will not read the statement to you since it will be entered into the record, but with your permission I would like to briefly outline the urgency for the continuation of the witchweed control budget through USDA APHIS.

The effort to eradicate witchweed was begun in 1957 when witchweed was discovered for the first time in the western hemisphere. The eradication effort is within five or six years of being completed. More than $99 million have been spent to reach this point in the program. Approximately one fourth of that amount over five or six years will complete the very difficult task.

Otherwise the risk is to see it again spread to even larger areas than when found. The system for eradication is in place with trained personnel prepared to finish the work. Rebuilding another system to try to begin again will be a duplicative expense if we fail to finish the work now.

There is a tendancy to look upon witchweed as a problem of the infested acres which occur in North and South Carolina only. We are the unfortunate legacy of the introduction of this very serious pest.

Obviously we will benefit if and when witchweed is eradicated. However, it is my belief that we will benefit no more than the entire nation eventually if the pest is destroyed. If allowed to resume its spread, it will become a severe problem where species of the graminae family are seasonably grown, most especially the feed grains of the United States. They attack corn, soybean, and other members of that family, Mr. Chairman.

Agronomists to whom I have talked believe that the famine in Africa is not entirely due to drought. There is a contribution from this pest witchweed. Africa is the home of witchweed. Witchweed is most severe on crops when they are under stress. Agronomists reason that sorghums and millets suffer from drought of course, but the presence an effect of witchweed places the crop under double jeopardy. Their harvest losses could be less acute if it were subject only to drought without the additional burden of the parastic witchweed. This is an example of what it can do on a national and even continental basis in the case of Africa.

Perhaps the more compelling reason to eradicate witchweed is not limited to the benefit of North and South Carolina and to the acres presently invested, but to the benefit of all the nation which may eventually suffer the consequences of our failure to successfully conclude this project.

Thank you, Mr. Chairman and members of the Committee.

Mr. Whitten. Thank you very much. And I hope you will give our regards to Commissioner Graham.

Mr. Spain. Thank you, sir.

Mr. Whitten. Again, may I say that North Carolina, through the years, has done a great job of providing information which we in turn have used with our colleagues in Congress. We appreciate your efforts.

Mr. Spain. Thank you, sir, thank you.

[The statement of Commissioner Graham follows:]

TESTIMONY SUBMITTED TO THE
HOUSE COMMITTEE ON APPROPRIATIONS
SUBCOMMITTEE ON
AGRICULTURE, RURAL DEVELOPMENT AND RELATED AGENCIES

BY: NORTH CAROLINA COMMISSIONER OF AGRICULTURE

JAMES A. GRAHAM

Congressman Whitten and members of the committee: Thank you for the opportunity to appear before you today to make a statement concerning the USDA-APHIS budget and specifically the complete elimination of funding for the witchweed program in FY 1987. It is my hope that funding for this program will be restored and the funding level increased so that eradication can be accomplished.

Witchweed is a parasitic weed that attacks corn, sorghum, sugar cane, and many grassy weeds. It can reduce yields by 50 percent, doing its damage underground by attaching to the roots of host plants. It was first found in the United States in the eastern part of North Carolina in 1956 and subsequently infested 38 counties in North Carolina and South Carolina. Its only known occurrence in the western hemisphere is in the Carolinas, but witchweed is a threat to all corn-growing areas of the United States.

The federal government reacted to the discovery of this pest by establishing a quarantine in 1957. Since that time, USDA personnel have regulated the movement of commodities and machinery that can spread the pest. They keep survey records on every known infested field, and help to prevent witchweed from producing seed using techniques especially developed for witchweed.

The witchweed program has been extremely successful. The spread of the weed has been contained within the same general area of discovery and has been eliminated from thirteen of the thirty-eight previously-infested counties. Approximately 79 percent of the total area ever known to have been infested has been released from quarantine or should be within two years. This is significant progress.

Eradication of witchweed could be achieved in six years if sufficient funding was provided. The FY 1986 level of funding of $4.7 million provides for the continuation of an effective regulatory, survey, suppression, and eradication program. Survey and control activities are vital components of the program because certification of commodities is based on the determination that witchweed is below detectable levels in a given field. This assumes that the witchweed status of every field is known through visual survey and soil sampling. Some regulated commodities from infested areas can move if they are washed free of soil. Suppression and eradication activities are geared toward decreasing the amount of acreage infested and spot-treating new infestations to prevent spread. Other states have faith in the quality of the cooperative witchweed program in its present form. They have not established their own exterior quarantines and accept the farm-by-farm certification as presently established.

In spite of these successes, funding for the witchweed program has been dropped from the FY 1987 Federal Budget. It is felt that: (1) the pest is below economically damaging levels; or (2) the states have the capability to undertake effective actions without federal aid. However, these points are not valid. Economic damage has been reduced, but only by the use of USDA-developed control measures and containment activities. If USDA involvement is ended, we can expect an exponential increase in proliferation of the weed and to again observe economic damage. The growers and regulatory agencies of the infested states do not have the capability to undertake effective actions without federal aid.

The technology and techniques to eliminate witchweed are not adapted for use by growers. There is no practical approach to control based on resistant or tolerant varieties. Conventional herbicides applied in the usual ways at the usual times are totally ineffective against witchweed. It is not economicaly feasible for growers to obtain, maintain, or operate the equipment, chemicals, and methodology required to effectively contain witchweed. In addition, rented land accounts for very large percentage of farm acreage in the infested area. Herbicides that do prevent witchweed buildup do not provide protection to the current crop. Because no protection, benefit, or profit is derived for the current year's crop, the renter will not spend money for applications. Few growers can spend money to control grassy weeds (hosts of witchweed) in non-host crops, noncropland, and idle fields.

The regulatory agencies of the states just do not have the funds nor the trained personnel to take over this job. Termination of USDA involvement in the witchweed program would be a regulatory nightmare for the infested states. If this were to happen, the Carolinas would be expected to assume responsibility for conducting a federally-mandated quarantine and certification program so that articles capable of moving the pest could be traded in national and international commerce (the quarantined commodities would include peanuts, sweet potatoes, Irish potatoes, nursery stock, cucumbers, watermelons, other vine crops, soybeans, corn, hay and peppers). The states would also have to regulate equipment sales yards, outdoor storage and shipping areas, and shipping containers such as bags, boxes and crates. Unless there were also survey and control activities, the witchweed status of individual fields would not be known, and as a result, regulated commodities could not be easily certified. Only those products, farm tools, and machinery that can be washed free of soil could move, assuming that personnel were available to certify the articles. Unless control was part of the program, witchweed would not be limited to a precise area as it has been. Spread would be inevitable.

USDA personnel are trained, in place, and currently handle all these activities. Again, the states just do not have the funds nor the trained personnel to take over this job. Without a solid, balanced program, non-infested states and foreign countries would probably establish exterior quarantines against commodities capable of spreading the pest. This could have disastrous effects on the Carolinas. In 1982, when the projected federal funding for the witchweed program for FY 1983 was also proposed to be totally eliminated, regulatory officials in non-infested states contacted those in the infested states asking what counties (not just farms) were infested. They were beginning the process of individual state quarantines against the pest. The value of regulated commodities in infested counties alone exceeds $550 million per year. As witchweed spreads, buffer areas beyond the presently-infested areas would be incorporated into exterior quarantine regulations established by non-infested states and countries. It would be only a matter of time before the bounds of the infested area could expand to other Carolina counties and then to the other parts of the United States.

Witchweed would begin to impact other areas of the U.S. The probability of long-range spread is much greater when seed is produced above ground, as would be the case with inadequate survey and control activities. If witchweed is detected in a field, it is estimated that it will take 3-5 years for it to totally infest the field, to achieve climax populations, and cause 50% yield reductions. Experts have estimated the rate of spread of witchweed to be exponential (that is, the area infested will double each year) without adequate control and quarantine activities.

In respect to direct effects on crops, witchweed is a threat to all corn-growing areas of the United States as it can thrive under the climatic conditions of the corn belt. The number of acres of corn, sorghum, and sugar cane in the United States that can potentially be infested with witchweed exceeds 80 million acres. These crops have an annual value in the U.S. of approximately $23 billion. Grower annual control costs could exceed $1.6 billion if a general infestation were to occur throughout the United States. One could still expect a 10% crop yield loss ($2.3 billion) even when available control practices are utilized because those available to growers at the present time are inadequate to do the job.

To avoid these disastrous consequences and keep on our timetable for eradication, we need to desperately resecure base funding for the program and the continuation of USDA involvement. However, if additional funding beyond this base could be obtained, eradication could proceed even more quickly with the present USDA personnel and technology as the basis. It is estimated that if this were to happen, all acreage could be released from quarantine by 1992. After that, the program would be one of survey with a decrease in control activity and a subsequent decrease in demands for funding. There has been approximately $99.3 million spent on witchweed since 1957. If the program is dropped now, all this effort will have been for nothing. $33 million more for eradication seems a small price to pay at this stage of the game (considering money already spent and the potential losses to growers when witchweed spreads).

The technology to suppress and eradicate witchweed exists. Substantial progress has been made in the last five years to achieve this goal. The state, federal and farmer participation structure is presently in place to implement an eradication plan. This progress can be continued with sufficient funding, and North Carolina and South Carolina can be rid of this pest in a relatively short period of time. The reduced level of funding proposed in the 1987 federal budget would allow witchweed plants to produce seed and spread to other areas of the United States.

To cut back on funding now would not be economically sound. It would be a giant step backward rather than just a delay in our fight against witchweed. We need desperately to resecure base funding for the program and the continuation of USDA involvement.

WEDNESDAY, APRIL 16, 1986.

SOIL AND WATER CONSERVATION

WITNESSES

MARY SECCOMBE, PRESIDENT, WESTERN RC&D ASSOCIATION

LARRY SHEPPERD, FIRST VICE PRESIDENT, WESTERN RC&D ASSOCIATION

Mrs. SMITH. Mary and Larry, will you come up.

Mr. Chairman, I want you to know that Mary Seccombe is the President of the Western RC&D Association. She comes from Montana.

And I want to tell you something about Larry Shepperd. I am so glad that you two have shaken hands. Because I want you to know that Larry is not only the first vice president of the RC&D Association, but he is the County Commissioner. And he is one of the strongest people in my Congressional District.

He came to my office yesterday and he said that he had heard you speak at the soil conservation meeting the day before.

Mr. WHITTEN. That is where they tendered me the $3 honorarium.

Mrs. SMITH. Well, he says——

Mr. WHITTEN. That was in advance of the speech. I believe they would have raised it a little bit after I got through.

Mrs. SMITH. You are not going to shut me off because I want to tell this.

Mr. WHITTEN. I know, I never could do that.

Mrs. SMITH. Larry came to my office yesterday and he said Mr. Whitten is one of the very greatest people in this country. He said I am deeply impressed by his speech and I tried to get up and shake his hand, and he said I wish before I leave Washington I can have a chance to shake his hand. I said you go with me to the hearing in the morning. And he has come. He wants to hear you again this morning. So that is what he has——

Mr. WHITTEN. I appreciate that. We understand why you stay in office.

Mrs. SMITH. Is not every word of that true, Larry?

Mr. SHEPPERD. That is true.

Mr. WHITTEN. I appreciate that. I will tell you this, we are all working on the right side. Agriculture is the foundation of all the rest. But it is getting badly damaged. So few people seem to know it. It is just unbelievable that grown people could act like that.

We are glad to have your statement in the record. Please touch on the high spots. We are very proud of RC&D, and we have had to restore it against budget recommendations regularly. And to go to some of the meetings in Larry's areas and in city areas and see what has developed in those communities as a result of this small program, it makes you feel good.

As I mentioned earlier when the 4-H Club was here, you just do not have any serious troubles when you have that kind of activity in a community. And how OMB can recommend we cut out funds for 4-H clubs is hard to understand. It is just unbelievable that folks could do that who are supposed to know something about this country.

I am speaking from the heart and from a background of agricultural knowledge. If we do not take care of our country, we cannot take care of all these other things that have developed over the years. I think about 30 times we have had to restore the ACP program. And I think the RC&D, we have had to restore it nearly every year since it has been in operation.

Ms. SECCOMBE. That is true.

Mr. WHITTEN. Certainly OMB does not envision what you do. Hopefully the Congress will put that money back again.

You may proceed.

Ms. SECCOMBE. Thank you, Mr. Chairman. Of course now you know why I am here, on behalf of our RC&D.

And I want to tell you I missed Jeanette today. And she usually comes and testifies too, and I was hoping to see her here this morning. But apparently she could not make it.

And I just wanted to reiterate that I enjoyed your comments at the NACD meeting Monday morning. I was there also. And about two or three years ago I was here, and I made the comment to you I felt that we had our priorities wrong and we needed to make agriculture number one.

And if we left agriculture go, where would our country be, and so on and so forth? And you told me that I was reiterating what you had already told the Committee session and had given me a copy of it. And I have to say that we are still thinking along the same lines.

Mr. WHITTEN. I have always said nobody has more than one sincere speech and philosophy. So I am making the same statements too. Thank you very much.

Ms. SECCOMBE. Thank you. We do really appreciate all of your support and that you have given the RC&D program down through the years. I agree wholeheartedly that we need to restore the small ACP program to help the farmers and ranchers out there who are in so much trouble right now. I feel that if we do not have them, where will our country be? We need those for the food.

We talk about huge defense and foreign moneys for foreign countries and that, but I agree, if we cannot take care of our own people here and take care of the farmers and ranchers, and we do not have the food and fiber to feed and clothe our people, I do not know where our country would end up.

So I feel that should be our number one priority. And as I say, we really appreciate your support. And I have given the written testimony for the record. And we appreciate your support down through the years for all of our programs, and also Congresswoman Smith's support. Because I know she is right there behind you supporting us too.

And we just want to say thank you for all of your help' And we know we can rely on your continued support. And I thank you for letting me come here and tell you that this morning.

Mr. WHITTEN. Well, it is a real nice statement about Mrs. Smith.

These programs over the years, they have meant so very much. For years we kept the Farmers Home Administration open for business. We in this Committee managed to keep RC&D in business. It is a great program.

But I do thank you for your interest and recognize the great contribution that all of you make to the well-being of this country. I hope we can all support our country, and say whatever you believe, wherever you go, you better have a strong country behind you.

As I said earlier, we have to have evidence here that we can take to the floor, because we represent you when we take the bill to the floor.

Mrs. **Smith**. Let me also express my appreciation to you folks. On this Committee we are all your friends. All of on this Committee understand what conserving our soil means, we know what RC&D means.

As the Chairman has told you, 29 times the President of the United States in both political parties took out soil conservation money. This Committee always puts the soil conservation money back.

And I agree with you that we should take care of our own country first. We have countries that were not wise enough to take care of their soil, Ethiopia for example, and now they cannot feed their own people. I am not among the people who wants to send $5 billion to Israel or $3 billion to Egypt or $250 million to Ireland, or Mozambique or Zimbabwe. I need think we need to start taking care of our own folks.

And probably our Appropriations Committee is not going to appropriate all of this $200 million for more than aid this year.

Ms. **Seccombe**. I am glad to hear that. Because I feel we need to take care of our own people first and foremost.

Mrs. **Smith**. We appreciate you being here.

Mr. **Whitten**. Thank you very much.

Mr. **Shepperd**. She did not make up that statement, Mr. Whitten. I do think you are one of the greatest people in the United States. And her 77 percent support rate is a little low.

Mr. **Whitten**. I still wonder about the other 23 percent.

Thank you very much.

Mrs. **Smith**. Mr. Chairman, I have one person that I would like to introduce. She is not a witness, but she has been the state president of the county commissioners, and she is the first woman county commissioner we had in my district, Irene Abernathy. Stand up and let everybody meet you. She is just here to eat lunch with me.

Mr. **Whitten**. That is where politics started.

Mrs. **Smith**. It started 12 years ago for me, and she was helping me.

Mr. **Whitten**. Thank you. We are glad to have you.

We stand-in recess until 1:00 o'clock.

[The statement of Mary J. Seccombe follows:]

WESTERN RESOURCE CONSERVATION AND DEVELOPMENT ASSOCIATION
RC&D
"Strength Through Unity"

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TESTIMONY OF
MARY J. SECCOMBE, PRESIDENT
WESTERN RC&D ASSOCIATION
TO THE
HOUSE AGRICULTURAL APPROPRIATIONS SUBCOMMITTEE
WASHINGTON, D.C.
APRIL 16, 1986

REPRESENTATIVE WHITTEN, MEMBERS OF THE COMMITTE, THANK YOU FOR ALLOWING ME TO APPEAR BEFORE YOU TODAY TO TESTIFY ON BEHALF OF THE RESOURCE CONSERVATION AND DEVELOPMENT PROGRAM, A PROGRAM ADMINISTERED BY THE SOIL CONSERVATION SERVICE. ONCE AGAIN THIS YEAR THE ADMINISTRATION HAS SEEN FIT TO PUT IN ZERO FUNDING FOR FOR OUR RC&D PROGRAM. ALTHOUGH THIS YEAR IT SEEM THAT IT IS CONSIDERABLY WORSE BECAUSE OF THE PHASING OUT OF MANY OTHER AGRICULTURAL PROGRAMS, SUCH AS THE SMALL WATERSHED PROGRAM AND THE GREAT PLAINS PROGRAM, ALL BUY ANNIHILATING THE EXTENSION PROGRAM, AND OF COURSE THE GREAT CUTBACK IN THE ASCS COST SHARE PROGRAM. WE ALL REALIZE THAT THERE IS A GREAT BUDGET DEFICIT AND I THINK WE ALL FEEL THAT SOMETHING HAS TO BE DONE ABOUT IT. I THINK WE FEEL THAT WE ARE ALL PATRIOTIC AMERICANS AND DO NOT WANT TO SEE OUR COUNTRY SLIDE DOWN HILL. I THINK THAT WE NEED TO RE-THINK OUR PRIORITIES. WITH SO MNAY OF OUR FARMERS AND RANCHERS IN TROUBLE AND THE TECHNICAL ASSISTANCE THAT IS NEEDED IN OUR AGRICULTURAL AND RURAL AREAS TODAY, I DO NOT FEEL THAT THIS IS THE TIME THAT WE SHOULD BE LOOKING AT AGRICULTURAL CUTBACKS IN FEDERAL PROGRAMS THAT WILL BE OF ASSISTANCE TO THEM. THE AGRICULTURUAL COMMUNITY FELT THAT AND STILL FEEL THAT IT WOULD BE DOING ITS PART BY HOLDING THE LINE ON FUNDING OF THE FEDERAL PROGRAMS THAT WOULD HELP THEM, OR POSSIBLY TAKING A SLIGHT DECREASE, BUT NOT BY CUTTING OUT PROGRAMS AND MASSACRING THE FUNDING FOR THE OTHERS. COUNTRIES IN THE PAST WHO HAVE NEGLECTED OR LET THEIR AGRICULTURAL PROGRAM GO BY THE WAYSIDE

ARE NO LONGER IN EXISTENCE OR ARE IN DEEP TROUBLE WITH THEM. I CERTAINLY DON'T THINK THAT THAT WE CAN TAKE THESE PROGRAMS AND ACTIVITIES FOR GRANTED AND LET THEM GO OR WE WILL BE IN THE SAME BOAT AND WILL BE DEPENDING ON OTHER NATIONS TO HELP US WITH FOOD, ETC. TO ME, AGRICULTURE IS THE NUMBER ONE PRIORITY OF THIS NATION, NOT BECAUSE I AM PREJUDICED, WHICH OF COURSE I AM, BUT BECAUSE WITHOUT THE FOOD, FIBER AND WATER TO TAKE CARE OF THE PEOPLE OF OUR NATION WHERE WILL WE BE? THESE PEOPLE NEED ALL THE ASSISTANCE THEY CAN GET AT THIS TIME, BOTH AGRICULTURE AND IN OUR RURAL COMMUNITIES. MORE AND MROE OF OUR FARMERS AND RANCHERS ARE GOING OUT OF BUSINESS AND GOING BANKRUPT EACH DAY. THERE ARE MANY FEWER FARMERS AND RANCHERS TODAY THAN THERE WERE A YEAR AGO AT THIS TIME. WHEN THEY GO OUT OF BUSINESS OR GO BANKRUPT, THIS IN TURN HURTS THE RURAL BUSINESSES WHERE THEY PURCHASE THEIR GOODS. THEN YOU SEE THE SMALL RURAL BUSINESSES CLOSING THEIR DOORS DUE TO LACK OF BUSINESS. IT IS A VERY VICIOUS CIRCLE AND IT IS GOING TO GET WORSE BEFORE IT GETS BETTER UNLESS WE ALL PITCH IN AND TRY TO DO SOMETHING ABOUT IT. THAT IS WHY I AM BACK HERE IN WASHINGTON AND WHY I AM HERE TODAY TO TESTIFY BEFORE YOU. IN MY ESTIMATION WE ARE HEADING IN THE WRONG DIRECTION. NO ONE, INCLUDING MYSELF, WANTS TO SEE OUR COUNTRY JEOPARDIZED IN THE DEFENSE AREA, BUT ON THE OTHER HAND, WITHOUT FOOD TO FEED OUR PEOPLE, THERE WILL BE NO ONE TO TAKE CARE OF THE DEFENSE AND WEAPONS WE ARE BUILDING. I BELIEVE THAT OUR AGRICULTURAL COMMUNITY IS BEING TAKEN VERY MUCH FOR GRANTED. IT HAS ALWAYS BEEN THERE FOR US AND IT WILL CONTINUE TO BE THERE: THAT IS THE VIEW OF MANY. HOW WRONG CAN YOU GET? THIS IS SO UNTRUE AND THEORIES SUCH AS THISARE VERY DAMAGING. OUR AGRICULTURAL AND RURAL COMMUNITIES ARE IN JEOPARDY AND DEEP TROUBLE AND WE NEED TO GIVE THEM A HELPING HAND AT THIS TIME. WE CANNOT DO THAT BY CUTTING OUT TECHNICAL ASSISTANCE AND CONSERVATION PROGRAMS OR PRACTICALLY ELIMINATING THEM.

THEREFORE, I AM HERE TO URGE THAT YOU GIVE EVERY CONSIDERATION TO RESTORING THE FUNDING FOR THE RC&D PROGRAM, THE ASCS COST SHARE PROGRAM, THE GRAT PLAINS PROGRAM, THE SMALL WATERSHED PROGRAM AND THE EXTENSION PROGRAM. EVERY ONE OF THESE PROGRAMS IS ESSENTIAL AND VITAL TO THE AGRICULTURAL AND RURAL COMMUNITIES.

THE RC&D PROGRAM, OUTSIDE OF THE TECHNICAL ASSISTANCE AND VERY LITTLE COST-SHARE FUNDS, IS MADE UP OF ALL VOLUNTEER WORKERS, SUCH AS MYSELF. I BELIEVE SO VERY MUCH IN THIS PROGRAM AND IS A MAJOR REASON WHY I AM HERE TODAY TO ASK THAT YOU RESTORE THE FUNDING FOR THE RC&D PROGRAM AGAIN THIS YEAR. WE ARE A SMALL PROGRAM ADMINISTRED BY THE SOIL CONSERVATION SERVICE, ONLY $26,000,000, BUT WE HAVE ACCOMPLISHED A GREAT DEAL WITH THESE FUNDS OVER THE YEARS. WE HAVE BEEN SEEKING FUNDING FROM OTHER AREAS, SUCH AS STATE GOVERNMENTS, GRANTS, ETC. BUT WE NEED THE FEDERAL FUNDING TO PAY FOR THE SCS TECHNICAL ASSISTANCE THAT IS SO VERY VITAL TO OUR PROGRAM. SOME OF THE PROJECTS THAT COME TO MIND THAT WE HAVE WORKED ON ARE

FLOODING PROJECTS, CRITICAL AREA TREATMENT PROJECTS, GRAVITY SPRINKLER FLOW PROJECTS FOR FARMERS AND RANCHERS, RECLAIMING LAND FROM TOXIC METALS FOR AGRICULTURE, REFORESTATION PROJECTS, WEED CONTROL PROJECTS, ASSISTING PEOPLE TO GET STARTED IN NEW BUSINESSES IN THE RURAL AREAS, AND I COULD GO ON ABOUT THE RC&D PROGRAM AND ITS ACCOMPLISHMENTS. I KNOW THAT MANY RECREATION AREAS HAVE BEEN STARTED UNDER THE AUSPICES OF THE RC&D PROGRAM ALSO. WE HAVE WORKED WITH PRIVATE LANDOWNERS, MANY OF THEM FARMERS AND RANCHERS, ON THEIR PRIVATE FORESTRY LANDS TO HELP THEM WITH PLANS, ETC. IT IS A SMALL PROGRAM, BUT WE ACCOMPLISH A GREAT DEAL AND WE NEED TO START TOOTING OUR HORN A LITTLE LOUDER AND LONGER IT SEEMS TO BE HEARD ON HOW WE ARE ASSISTING OUR COMMUNITIES. THE ASCS COST SHARE PROGRAM IS VERY VITAL TO THE FARMERS AND RANCHERS: THE SMALL WATERSHED PROGRAM IS VERY MUCH NEEDED: THE GREAT PLAINS PROGRAM HAS ACCOMPLISHED SO MUCH SINCE ITS INCEPTION AND THE EXTENSION SERVICE IS VITAL TO THE AGRICULTURAL AND RURAL COMMUNITIES AS THEY WORK WITH THEM EVERY DAY IN SUCH AREAS AS 4-H YOUTH PROGRAMS, INFORMATION PROGRAMS ON BEEF, SWINE AND DAIRY HERDS, ASSISTING THEM WITH PUTTING IN TERMINALS AND SMALL COMPUTERS TO HELP THEM WITH THEIR PRODUCTION, ETC. AND HELPING THE WIVES IN SO MANY AREAS.

AT THIS TIME, I FEEL THAT IT IS VITAL TO KEEP THE EXTENSION PROGRAM GOING RATHER THAN TRYING TO COMPLETELY CUT IT.

ALTHOUGH I AM HERE ON BEHALF OF OUR RC&D PROGRAM MAINLY BECAUSE IT IS SO NEAR AND DEAR TO MY HEART AS I HAVE WORKED WITH IT FOR OVER TWELVE YEARS AND KNOW WHAT IT MEANS TO OUR RURAL AREAS, I ALSO THINK THAT IT IS ABSOLUTELY NECESSARY TO KEEP OUR OTHER AGRICULTURAL AND CONSERVATION PROGRAMS INTACT TOO. THIS IS NOT THE TIME TO BE CUTTING BACK ON RURAL AMERICA BUT INSTEAD GIVE IT A SHOT IN THE ARM BY GIVING IT THE ASSISTANCE IT NEEDS. IF WE DO NOT WANT TO SEE RURAL AMERICA VANICH, THEN WE MUST HELP THEM IN THEIR TIME OF NEED. OUR AGRICULTURAL AND RURAL COMMUNITIES NEED ASSISTANCE AND I FEEL THAT IT IS NECESSARY FOR US TO GIVE THEM THAT ASSISTANCE BY RESTORING THE FUNDING FOR THE PROGRAMS UNDER THE SOIL CONSERVATION SERVICE, AGRICULTURAL STABILIZATION AND CONSERVATION SERVICE, EXTENSION SERVICE, FOREST SERVICE, ETC. IF WE WISH TO SEE AMERICA CONTINUE TO EXIST AS IT HAS IN THE PAST, WE MUST TAKE STEPS TO SET HER ON THE RIGHT TRACK ONCE AGAIN.

AS I STATED IN THE BEGINNING, WE ALL FEEL THAT SOMETHING HAS TO BE DONE ABOUT THE BUDGET DEFICIT, BUT AT WHAT EXPENSE? WE NEED TO RE-THINK OUR PRIOTIES AND FUND THE CONSERVATION PROGRAMS THAT ARE NEEDED TO ALLOW OUR COUNTRY TO CONTINUE AS IT HAS IN THE PAST.

PLEASE GIVE EVERY CONSIDERATION TO CONTINUING THE FUNDING OF THE AGRICULTURAL AND CONSER-

VATION PROGRAMS ADMINISTERED BY THE SOIL CONSERVATION SERVICE AND BY THE U. S. DEPARTMENT OF AGRICLTURE.

AGAIN, I WOULD LIKE TO TAKE THIS OPPORTUNITY TO THANK YOU REPRESENTATIVE WHITTEN ON BEHALF OF THE RC&D PROGRAM AND ALL THE AGRICULTURAL AND CONSERVATION PROGRAMS, FOR ALL THE SUPPORT YOU HAVE GIVEN US IN THE PAST AND SUPPORT WE KNOW WE CAN COUNT ON IN THE FUTURE AND ALSO TO THANK THE MEMBERS OF YOUR COMMITTEE FOR THEIR CONTINUED SUPPORT. REPRESENTATIVE SMITH FROM NEBRASKA HAS BEEN VERY GRACIOUS TO US IN SOME MANY WAYS. THANK YOU FOR ALLOWING ME TO TESTIFY BEFORE YOU TODAY AND TO STATE MY VIEWS ON THE SITUATION THAT IS CONFRONTING US IN THE AGRICULTURAL AND RURAL AREAS OF OUR COUNTRY TODAY.

EXAMPLES OF RC&D ASSISTED PROJECTS IN THE HEADWATERS RC&D AREA IN MONTANA

PRESENT RC&D ASSISTED PROJECTS

Measure No.	Measure Name
114SB35	Road project for Brown's Gulch Drainage
135SB44	Grounds for Silver Bow County Fairground
168SB62	Butte Gun Club unit plan
173DL09	State Check Scaler
174DL10	Forestry Information and Education Program
175DL11	Forest Products Utilization
176DL12	Management of Private Woodlands
177DL13	Continuing Forestry Education
182DL14	West Valley Flood Control
185M29	McHessor Dry Gulch Gravity Irrigation
186M30	Road Maintenance for School Bus
187DL15	West Valley Park
188M31	Twin Bridges Park
190M32	Madison County Certified Weed Seed Free Program
192DL16	Chirico Nursery
195DL17	Toxic Metal proposal
196J26	Computer Education
197J27	Summer Conservation Education Workshop
199DL18	"A" & "C" Hill Anaconda Soil Stabilization and Erosion Control
200P17	Lumber Export Market
204J29	Southwest Montana Cooperative Noxious Weed Control Areas
205G18	Mentzer-Greybeal Gravity Sprinkler
206P18	Jefferson Gulch Placer Mine Reclamation
207J30	Boulder Flood Project
209P19	Powell County Coordinated Weed Control
210P20	Grant-Kohrs Streambank Stabilization
211SB69	Water Resource Development and Conservation Accelerated Services
212B22	Trail Creek Irrigation
213B23	Beaverhead Tillage and Conservation Planner
214J31	Dolan Irrigation
215M35	Madison Forestry
216DL19	Anaconda Wood Pelleting Plant

Projects by County

County	No. Projects	Active	Areawide
Beaverhead	2	2	0
Deer Lodge	11	10	6
Jefferson	5	5	3
Granite	1	1	0
Silver Bow	4	2	1
Madison	5	2	0
Powell	4	3	1
TOTAL	32	25	11

WEDNESDAY, APRIL 16, 1986.

RESOURCE CONSERVATION AND DEVELOPMENT

WITNESS

RICHARD A. KARSEN, SR., CHAIRMAN, MICHIGAN COUNCIL OF RC&D AREAS

Mr. **WHITTEN**. The Committee will come to order.

We have first Mr. Richard A. Karsen, Sr., Michigan Council of RC&D.

Mr. **MYERS**. Michigan Council. That is where you have been getting the snows.

Mr. **KARSEN**. Yeah, we have had a few of them there.

Mr. **MYERS**. Have you got snow right now?

Mr. **KARSEN**. There was snow this morning between Flint and Detroit. But further north it was just foggy.

Mr. **WHITTEN**. We will be glad to hear from you, sir.

Mr. **KARSEN**. I have submitted a statement so I will not get into that. But I will go into some details on the RC&D program of what we feel in Michigan.

I believe the RC&D program is a very essential program to what this Administration and others have been trying to push for years. Local leadership control and direction. Outside assistance is asked for when needed to carry out what local people have decided is needed. The sponsors of the RC&D program, who are conservation districts and county governments and others in some cases, are exerting strong leadership in RC&D affairs, as you know. They are providing the leadership that brings about the involvement of cities, towns and other governments, and other groups and organizations, as well as individuals.

This relationship has proved to be the most effective way to get local issues identified and solved. The RC&D program is geared to action. Guided by the plan, and exercising the planning process, goals and objectives are set, courses of action are carried out, measures are installed, and the results show up in the form of better living conditions, more jobs, and better homes, better income. All this comes about through citizens involvement and precipitation.

At the moment, the RC&D program is the only rural development program of the United States Department of Agriculture. Times are the toughest in rural America, as in any of the last 40 to 50 years. Farm foreclosures are taking place at an unprecedented rate. To abandon any effects now by the USDA to assist in trying to find solutions to help rural areas solve these most difficult problems would be irresponsible at best. The very future and health of this Nation is dependent on healthy rural economy.

I believe these are some ideas that pretty much address the central issue that rule American needs and the help it needs badly.

Mr. **WHITTEN**. Thank you very much.

We on this Committee have had to restore the RC&D development projects through the years. I do not know why the Office of

Budget and Management does not realize the value the program has.

We appreciate your appearance here. When we go to the floor, we in turn have to make the case for these activities.

I regret to say there does not seem to be an appreciation of these programs by the Office of Budget and Management. Before us today is a budget request which cuts the programs of the Department by around $A9 billion for 1987. And we have a difficult job in restoring these. But I do think that we should restore them. We appreciate your appearance.

Mr. **Karsen**. Thank you.

[The statement of Richard A. Karson, Sr. follows:]

Michigan Council
of
Resource Conservation and Development Areas

March 14, 1986

311 Lake Street
Harrisville, MI 48740

Honorable Jamie L. Whitten
Chairman House Appropriations Sub-Committee
On Agriculture, Rural Development and Related Agencies
United States House of Representatives
Washington, D.C. 20515

Dear Congressman Whitten:

We are greatly distressed over the lack of concern for rural America and it's natural resources as reflected in the proposed budget recommendations. National appropriations for the Soil Conservation Service Fiscal Year 1986 are $667 million. The proposed Fiscal Year 1987 budget calls for $350 million for a continuing program which represents a 47% cut.

In Michigan, this means total elimination of cost-sharing for Watershed Protection, Flood Prevention, and Resource Conservation and Development.

Those of us who live in rural America and work with agriculture have seen the value of the RC&D Program, not only to the protection and improvement of our natural resources, but also the importance of the wise use of natural resources, and the economic contribution they make to our nation. Neglecting the care of these resources would be disastrous, not only for our nation but for the entire world.

In the past few years many people have been assisted in their attempts to improve their communities with RC&D sponsored projects, ranging from agricultural drainage to improved cropping and marketing projects, management of existing forestlands, marketing of forest products, reforestation of barren land, protecting water quality, erosion control on lakes and streams, including the great lakes and protecting and improving recreation areas.

In Michigan we find that recreation and tourism in our RC&D areas is a 5.1 million dollar industry, making it the major industry ahead of agriculture and the automobile industry in the four areas we serve. The maintainance and proper management of our natural resources has played a major part in making this possible, RC&D is looked upon as a tool to make this possible.

We are deeply concerned with the recommendation to phase out RC&D in the budget. We appreciate the stand your committee and congressional members took last year in hearing testimony on the value of the RC&D Program and approving this program in opposition to the administration and USDA.

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201 Rublein Street
Marquette, MI 49855
(906) 226 - 7487

Northwest Michigan RC&D
3674 N. US-31 South
Traverse City, MI 49684
(616) 946 - 6811

Huron Pines RC&D
City Hall, P.O. Box 541
Grayling, MI 49738
(517) 348 - 9319

Sauk Trails RC&D
4035 M-139
St. Joseph, MI 49085
(616) 429 - 2112

They are both playing the same game and saying congress doesn't know what is needed to spur rural development. We have too much respect for the collective judgement of the members of congress to sit silently by and let the RC&D Program be written off.

SCS has done a remarkable job of coordinating the work in RC&D, particularly in developing local leadership, getting all units of government to work together for a common cause, preparing projects for completion and obtaining financial support for projects.

One important aspect of the RC&D program has been its ability to draw together the people of a community, representing both public and private interests, working for a common goal that will improve the quality of life as well as protecting and improving our natural resources.

While some of our projects are completed with the use of federal funds, we also know that an equal or greater amount is contributed by the use of funds from local townships, village, city, county and state governments and agencies. These associated measures emphasize the importance of the RC&D program to our local communities. This is a program for both communities and people.

Our requests are these: First, resist the shallow reasoning of the administrations' budget people and the policies they are forcing upon agency people to kill the program. Second, consider a continuation of the present appropriation of 26 million dollars. While we realize this will leave us with only a skeleton program we are willing to take what will amount to about a 5 percent decrease in funding in the hope that better judgment of the administration in the future will continue the program.

We hope your committee will continue their support and help keep this program in operation. We thank you, Mr. Chairman, and your committee for your interest and consideration.

Sincerely:

Richard A. Karsen Sr.
Richard A. Karsen Sr.
Chairman
Michigan Council of RC&D Areas

RAK/km

WEDNESDAY, APRIL 16, 1986.

RESOURCE MANAGEMENT PROGRAMS

WITNESS

R. NEIL SAMPSON, EXECUTIVE VICE PRESIDENT, AMERICAN FORESTRY ASSOCIATION

Mr. WHITTEN. Next we have Mr. Neil Sampson, American Forestry Association.

Mr. Sampson, we are glad to see you.

Mr. SAMPSON. Thank you, Mr. Chairman.

I submitted a statement today and——

Mr. WHITTEN. We will be glad to have it appear in the record.

Mr. SAMPSON. I did not come here to try and convince this Committee to support soil and water conservation. When I advise students who are writing papers trying to define what the work of the Federal Government in this field has been for the last 50 years, I use your Committee reports as references. So I just came today to hopefully bring you some different and new information that you can use in your ongoing arguments to try to retain some priorities for these programs.

I have attached as an attachment to my testimony a series of graphs that are simply made from the President's budget documents. I took the numbers just as they are printed and put them in there, hoping that we could, by widespread distribution of those, let people see with their own eyes where those priorities are leading this country.

You know, we say this in various words every year. You have written the same general theme in your Committee's work for, lo, these many years. But it seems like every year we try to come up with a new way, a new way to convince people of the need to apply some of their priorities in this great Nation of ours to the attention of our natural resource base and our productivity and to our agriculture.

The programs that I featured in the testimony, Mr. Chairman, are those of the SDS, the Renewable Natural Resources Extension Act, and Extension Service, the ACP program, the agricultural conservation program, and the forestry incentives program, all programs that we are very concerned about.

The Renewable Extension Act, for example, has for every dollar, every position that has been funded out in the States with Federal money, three positions have been drawn out of State and local and private sources. It was fine for folks to say that Extension should have been providing strong natural resources education effort over the years. But the plain facts of the matter was that before the Congress enacted this Act in 1977, they were not, and now they are. And I think it is a graphic example of how a little bit of Federal money can do a great deal.

The program that you shepherded for these many years, the agricultural conservation program, has always drawn far more private dollars, far more other dollars into conservation than the cost to the Federal Government, as has the forestry incentives program and, of course, the programs of the Soil Conservation Service which essentially encourage private action, most of which is done at private expense.

So, Mr. Chairman, we have brought this to you today to let you know that there are associations across this country that support your efforts, and will try to support your efforts as you go forward, try to hold these programs at least at the 1986 funding levels in some way, shape or form.

Mr. WHITTEN. Thank you very much.

We do appreciate your appearance here. And as I have said, without passing on all the other things we have to do, we had better take care of agriculture and forestry—which are the base for our own country.

We appreciate your help, and we do need the support of the American people. Our basic resources, belong to all of us, and all of us had better contribute to their preservation, because we just cannot leave it all to those who may own the land temporarily.

So thank you for your appearance and your efforts.

Mr. SAMPSON. Thank you, Mr. Chairman.

[Statement follows:]

AMERICAN FORESTRY ASSOCIATION
balanced forest use
Founded 1875 1319 Eighteenth Street NW Washington DC 20036 telephone (202) 467-5810

Statement of

R. Neil Sampson
Executive Vice President
American Forestry Association

to the

House Committee on Appropriations

Subcommittee on Agriculture, Rural Development, and Related Agencies

April 16, 1986

The American Forestry Association, the national citizen's organization for trees, forests, and forestry, is deeply distressed by the proposed reductions to the U.S. Department of Agriculture's conservation budget for FY 87. We thank you for the opportunity to testify in support of the vital soil and water resource management programs of the Soil Conservation Service, the Renewable Natural Resources Extension budget of the Extension Service, and the Forestry Incentives Program and the Agricultural Conservation Program of the ASCS.

Mr. Chairman, we are very aware — and frankly quite grateful — that we will be "preaching to the choir" today, as we testify in support of these vital programs. We did not come here to convince you to support soil and water conservation — the work that this Committee has done to protect our nation's forest and agricultural resources is obvious and exemplary. We come before you today to demonstrate our continued appreciation and support for the important conservation programs which this Committee has championed.

AFA would like to publicly commend Chairman Whitten's careful and sucessful navigation of the delicate negotiations concerning Conservation Reserve funding — during which you consistently opposed the "false economy" of a trade-off between the traditional programs which have provided the backbone of our conservation efforts in years past, for the promising new programs of the 1985 Farm Bill.

We would also like to offer some additional information that we hope you will find helpful in your future deliberations on behalf of our nation's soil and water resources. As the Chairman and other members of this subcommittee have so eloquently stated, it is folly to label as "non-essential" those programs which have effectively developed and protected the productivity of our agricultural and natural resources, the very resources that have helped this nation assume its position as a world leader.

The Administration's proposals demonstrate an ignorance of this fundamental relationship between our food and fiber production capabilities and national stability. Soil erosion, for example, is as serious in many repects today as it was in 1935. In some regions in the breadbasket of the Nation, two acres out of every three are suffering more than tolerable soil loss, according to the 1982 National Resource Inventories. The current agricultural economy is not all that rosy, either. Without going into the sad story of increasing farm debt, high rates of farm bankruptcies, high costs and low prices, it is sufficient to say that farmers are fighting to stay in business under severe handicaps.

But what is today's political response to those problems which sound like a modern-day re-run of the 1930's? For the past five years, the United States has been embarked on an historic retrenchment of government involvement in many domestic areas. While this has cut into the natural resource, agriculture, and conservation programs seriously, it has also resulted in huge deficits, fueled by the steady rise of federal spending for defense, payments to individuals, and the interest on the debt itself. We have prepared, and attached to our testimony today, a report entitled "Into The Gramm-Rudman Era" to describe the effect of the Administration's fiscal and budget priorities on our enviromental and agricultural programs.

What these data show, we think, is that our forestry, conservation, and agricultural efforts have already done their share of shrinking. The modest investments that we as a nation have made in our most basic of resources, our soil and water, are not the cause of the deficit, and fool-hardily targeting them to absorb further severe cuts will have no impact on the deficit. What it will have — and what we cannot afford — is a potentially devastating impact on resource stability and productivity in the years to come.

Some of the Administration's proposals are not only ill-advised, they are spectacularly ill-timed. The SCS, for example, has done a great deal of work in the past 8 years to sharpen and improve their programs under the encouragement of the Resources Conservation Act. They have targeted many programs, and improved management in virtually all phases of their activity. It is poor policy to reward such efforts with the kind of budget phase-out proposed by the Administration. We urge you to retain the SCS programs, particularly technical assistance and Watershed Protection, at the 1986 program levels.

When the Renewable Natural Resources Extension Act was passed in 1978, it enjoyed broad-based support from conservation organizations including wildlife and grazing, as well as forestry interests. Its primary function is to encourage the delivery of technical information and advice to small nonindustrial landowners. These people are the decision-makers on 58% of the nation's forestland, and 64% of our rangeland. Their attitudes and management decisions not only affect the level of natural resource commodity outputs from these lands, but also control the potential of these lands to provide wildlife habitat, soil and water protection, and outdoor recreation opportunities.

RREA encourages educational programs leading to more efficient, environmentally sound management of this vital component of our country's range and forest resource base. Federal support of these natural resource extension efforts serve as a magnet attracting funds from both private and public agencies and organizations for resource education programs. For every state level natural resource staff position provided by federal funds, state and local funds have generated 3 additional positions. We urge you to establish FY 1987 funding at the current level, which would maintain a viable program, although falling short of the goal of involving every state in the effort.

The Agricultural Conservation Program has also gone through intensive review and improvement in recent years. It was funded at a level of $190 million in fiscal '85 and '86, but is proposed for elimination in fiscal '87. We believe that funding for this program should be maintained at the $190 million level to cope with some of the very serious economic and conservation problems this country and its farmers are facing. We believe that the farmlands so vital to our future are experiencing levels of erosion and losses of soil fertility that must be controlled in order to protect the continued productivity of these lands.

ACP cost-sharing encourages the installation of erosion control measures which protect both our land and water resources. Our nation as a whole benefits from the prevention of serious topsoil losses and water quality problems; the ACP program is needed to continue the fight for soil and water conservation.

AFA is concerned with the elimination of the Forestry Incentives Program in the President's budget. Arguments are made that the federal government should not be supporting reforestation activities on private lands. That is an activity, supposedly, that should be the responsiblity of state and local institutions or the forest products industry's small woodland owner assistance program. Although we strongly support a cooperative approach to encouraging good management and reforestation, we feel that the federal government has an important part to play in this area. State and local agency budgets and the forest products industry cannot handle the job alone.

The forestry incentives program has demonstrated its effectiveness in bringing about more acceptable levels of regeneration on cut-over lands. This, in turn, protects the future productivity of these areas, while allowing their continued productive use. In the southeastern United States, in particular, regeneration is not keeping up with harvests, and prime sites are reverting to low-value scrub hardwoods, FIP is a cost-effective method of addressing this problem.

We appreciate this chance to express our views.

INTO THE GRAMM-RUDMAN ERA ....

Neil Sampson

American Forestry Assn.
April 3, 1986

INTO THE GRAMM-RUDMAN ERA...

Introduction

The following set of graphs and explanatory materials is an attempt to explain recent trends that have affected federal budgets, as well as point out where the current plans for federal spending being developed in the Administration will lead if the Congress accepts them. The material is drawn from the 1987 Federal Budget Documents produced by the Office of Management and Budget. (1984 spending figures come from the 1986 books.)

The constant-dollar comparisons are made with factors developed by the Bureau of Economic Analysis of the Department of Commerce. In 1987, the federal government shifted to a base using 1982 constant dollars, with the deflator factors developed by BEA. These can be found in table 6.1 of "Historical Tables", one of the 1987 Federal Budget Documents.

Using constant 1982 dollars allows a look at the comparative purchasing power of the federal program activities over the years, with the effects of inflation removed. In the charts, the term "Nominal Dollars" means the dollar amounts that actually were appropriated or spent during the year in question. "1982 Dollars" converts those amounts to the equivalent "inflation-free" program levels.

Our goal is to understand the impact of recent budget trends on spending for natural resource programs, particularly forestry and soil conservation. We will also look at the spending plans for the next few years, as expressed in the budget documents. In order to understand these relatively small programs, we will begin with the total budget and continue to tighten our focus until we can see these programs in perspective.

Federal Receipts and Outlays — 1970 - 1987

As figure 1 shows, federal receipts and outlays followed each other fairly closely from 1970 until 1980. The gaps produced federal deficits that were generally in the range of 6 - 60 billion dollars. In 1981, the gap began to widen rapidly, as receipts flattened off due to the 1981 Tax Bill and the recession. Receipts stayed flat from 1981 to 1983, then began to rise again at roughly the same rate as outlays. By then, however, the annual deficits were in the $200 billion-per-year range, where they continue at this time.

Defense versus Non-Defense Spending

In constant-dollar terms, defense spending dropped by about one-third between 1970 and 1976. From 1976 until 1980, some increases were experienced, and in 1981 the current spending buildup began which has resulted, in 1986, in an increase of over 50 percent, in real-dollar terms, in defense spending.

Non-defense outlays grew steadily from 1970 until 1985, with only minor variations as the current Administration attempted to slow that growth in the 1981-1985 budgets. In real-dollar terms, non-defense spending has about doubled since 1970.

Non-defense spending is made up of several parts. The largest is called "Payments to individuals." They include outlays for medical care in veteran's hospitals, medicare, subsidies to reduce housing costs, and food stamps. A significant amount of these funds may be in the form of grants to states, who then administer the programs.

The second category is "Grants to States." These are the non-defense funds sent to state government that are not intended for use as payments to individuals.

Third is "Net Interest." This includes all interest paid, minus offsetting receipts. Most of the interest is paid to the public as interest on the national debt. In many ways, this is an "income transfer" program similar to "Payments to Individuals." The difference, of course, is that interest paid on the national debt transfers income from taxpayers to bondholders, which are likely to be financial institutions and wealthy individuals.

The fourth category is "All Other," and it is in this area that we find nearly all of the programs that make up the functioning of the federal government. It includes all federal loan activities and most federal spending for foreign assistance, farm price supports, medical and other scientific research, and, of course, all natural resource programs.

Figure 2a. shows how these components have changed since 1970. In general, payments to individuals make up most of the recent increases, with net interest beginning to assume a more dominant position since 1981 as the national debt has expanded. "All Other" expenditures have remained virtually unchanged for 15 years, in real-dollar spending terms. Grants to states have been on a gradual decline since 1978.

As these figures demonstrate, the growth in federal spending between 1970 and 1980 was virtually all the result of increases in welfare programs; the increases since then have resulted from continued growth in that area, compounded by a significant buildup in defense spending and an increase in net interest payments due to the increasing federal deficit. These relationships are, of course, expressed in constant-dollar terms.

Figure 1.

FEDERAL RECEIPTS AND OUTLAYS

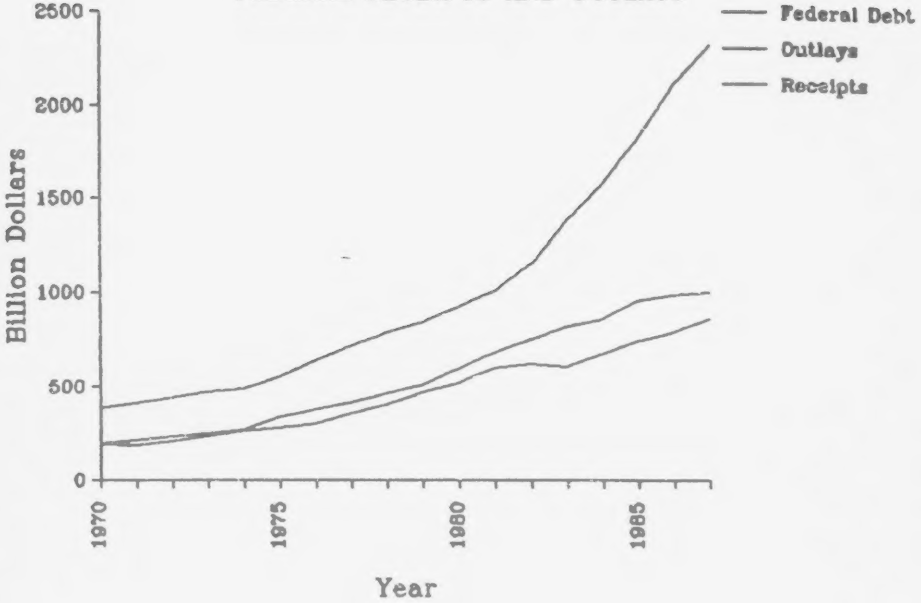


Figure 2.

FEDERAL OUTLAYS BY MAJOR FUNCTION

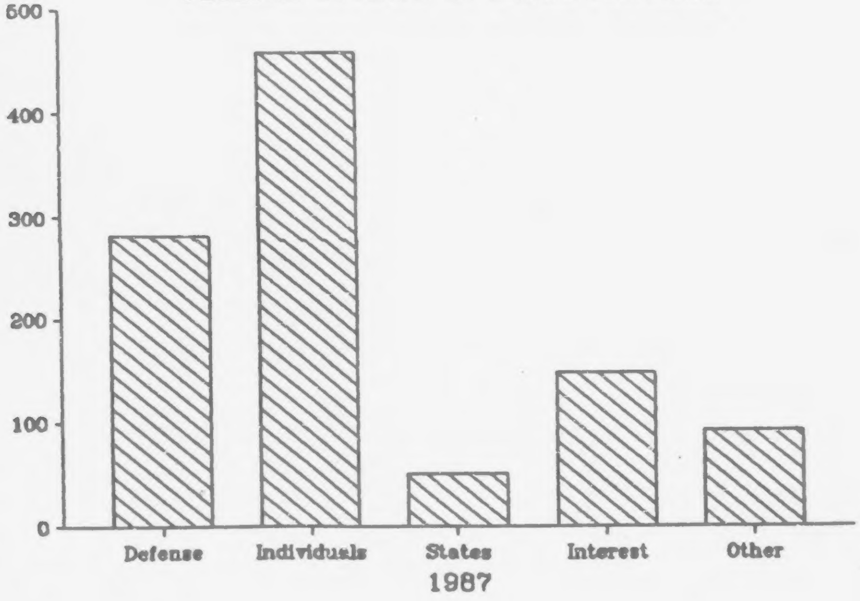
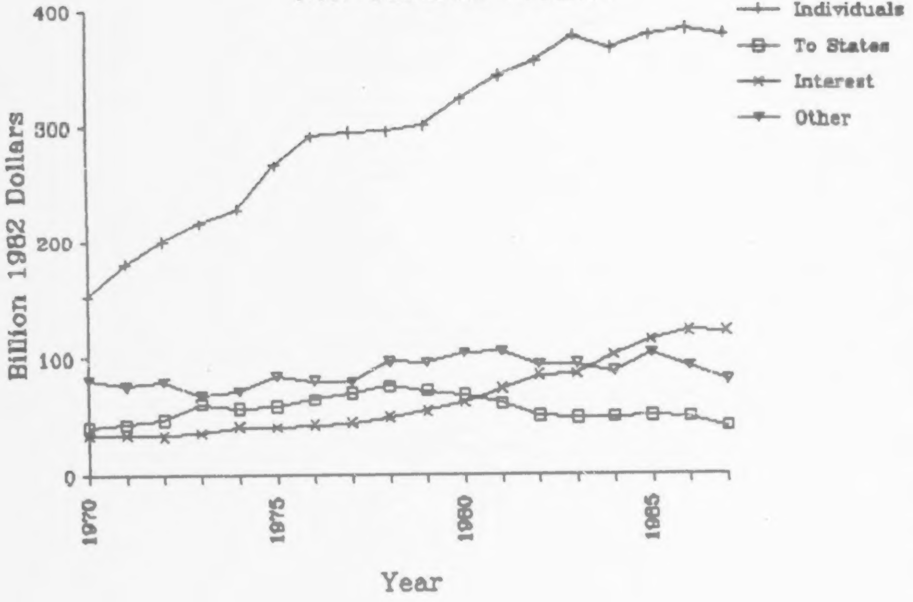


Figure 2a.
NON-DEFENSE OUTLAYS



Natural Resources and Environment

The recent trends and near-term plans for natural resource spending are shown by the series of line graphs (Figures 3 to 8).

There are 5 breakdowns within NRE, for budget purposes. Conservation and Land Management contains budgets for the Forest Service, Bureau of Land Management, Mining Reclamation and Enforcement, Conservation of Agricultural Lands (SCS technical programs and ASCS cost-sharing programs), and an "other" category.

Water Resources contains budgets for the Corps of Engineers, the Bureau of Reclamation, and the watershed programs of the Soil Conservation Service.

Recreational Resources contains federal land acquisition budgets for parks, urban and historic preservation, and operation of recreational resources.

Pollution Control and Abatement contains EPA programs, including Superfund and sewage treatment grants. It also contains some Corps of Engineers funding.

There is also an "Other" category which contains such programs as those of the Geological Survey, Bureau of Mines, and the National Oceanic and Atmospheric Administration.

Figure 3 shows that spending for NRE has declined since 1978, particularly when viewed in constant-dollar terms. That decline is planned to continue. If the Reagan budget projections are realized, real spending for natural resources and environment will drop by more than half between 1978 and 1990.

The spending trends in natural resource budgets will not be uniformly spread across the spending categories, as the graphs illustrate.

Pollution control, which peaked in 1978, will be only one-quarter as large, in constant-dollar terms, by 1990.

Water resources, which has shrunk by almost half since 1978, will hold at about the same purchasing levels under the current budget proposal.

Conservation and Land Management will virtually disappear, with revenues produced from public lands and resources supporting much of the Forest Service and BLM, while SCS services on private lands diminish to low levels and cost-sharing programs that assist in putting conservation on the land disappear.

Recreation will drop by over half, largely through the elimination of all land purchase activity.

Other NRE programs will hold fairly steady, having dropped slightly since the peak in 1979.

Figure 3.

NATURAL RESOURCES AND ENVIRONMENT

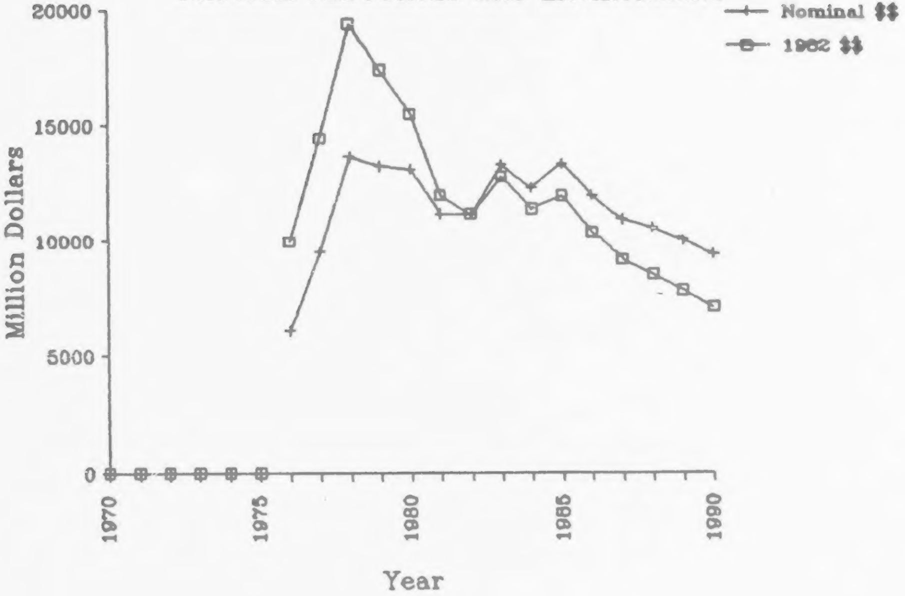


Figure 4.

Conservation and Lands

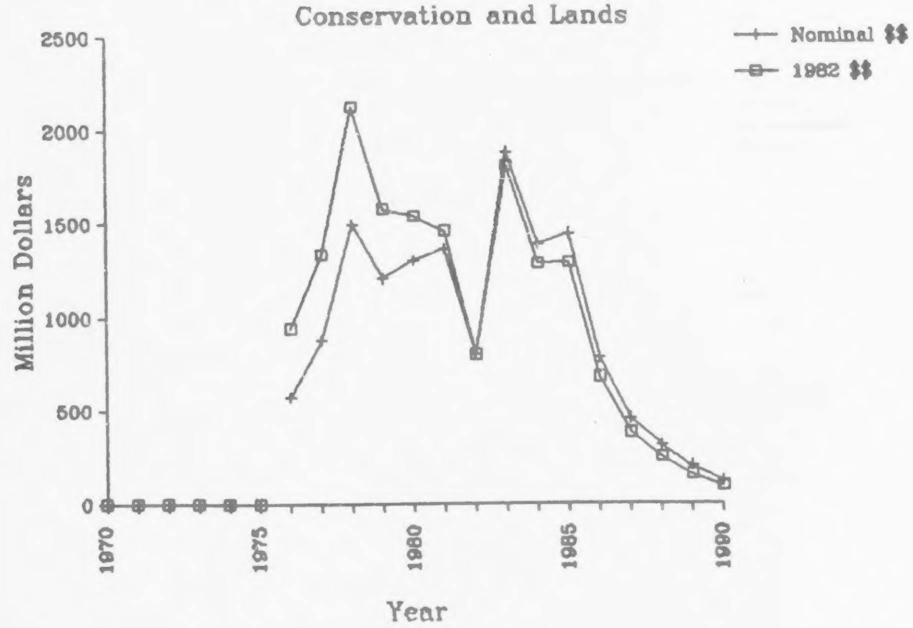


Figure 5
Water Resources

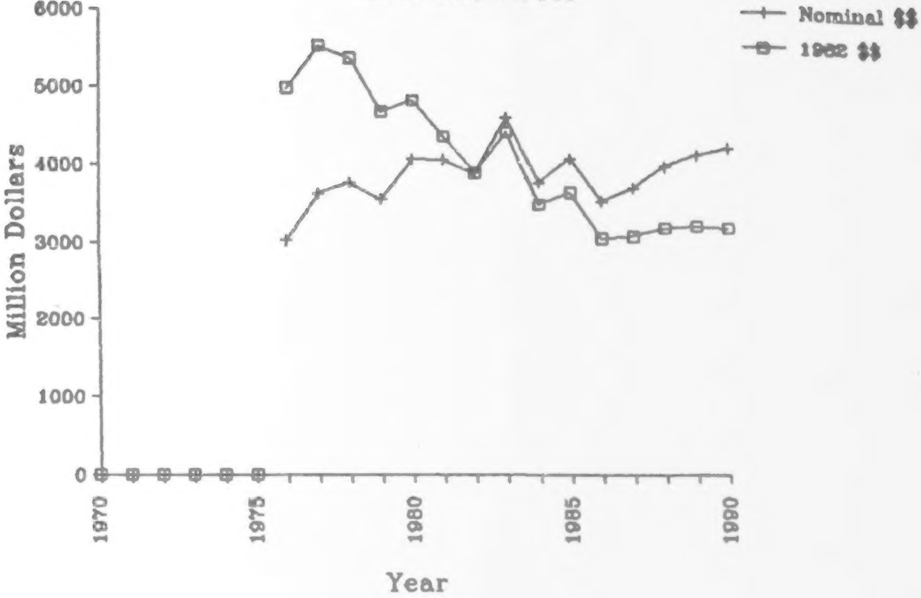


Figure 6.
Recreation

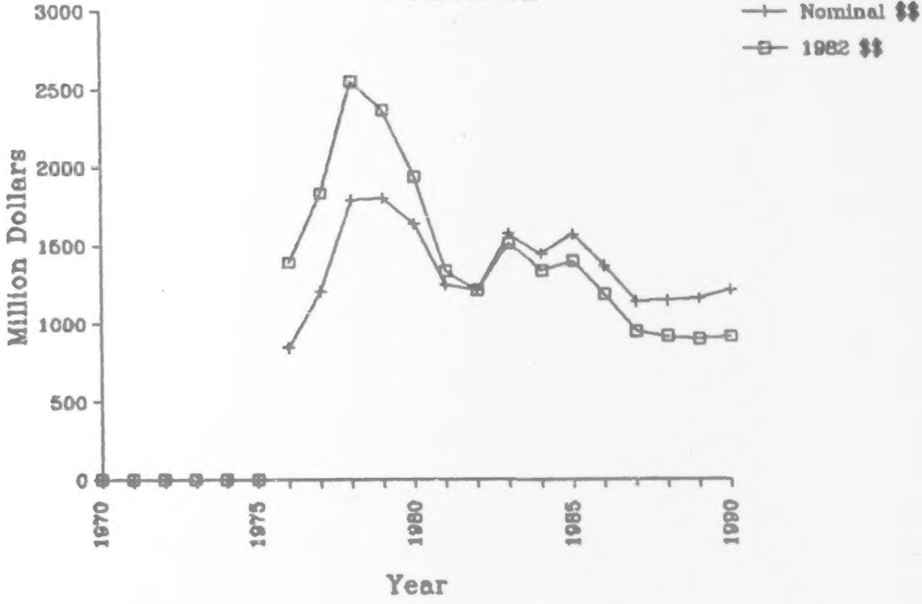


Figure 7.

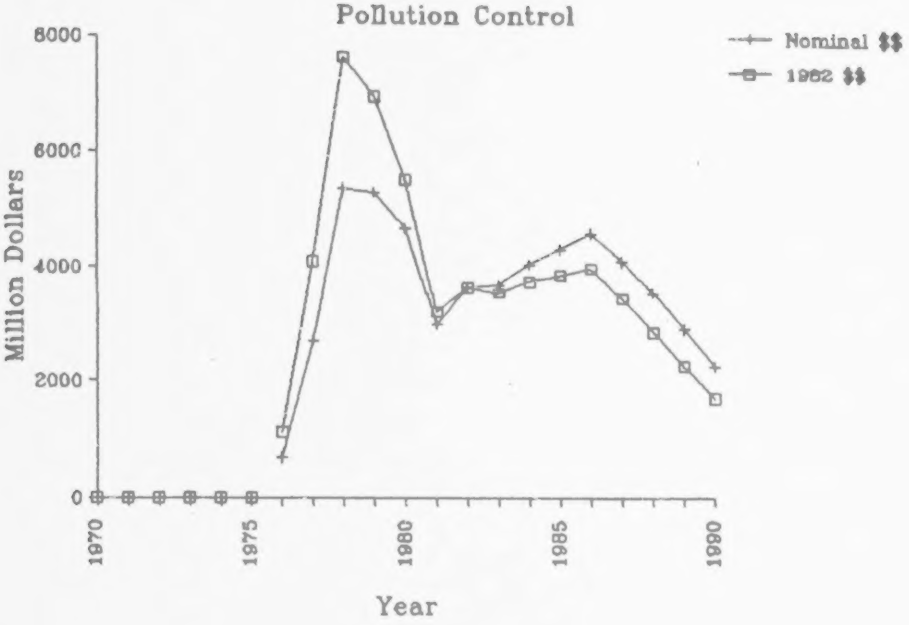
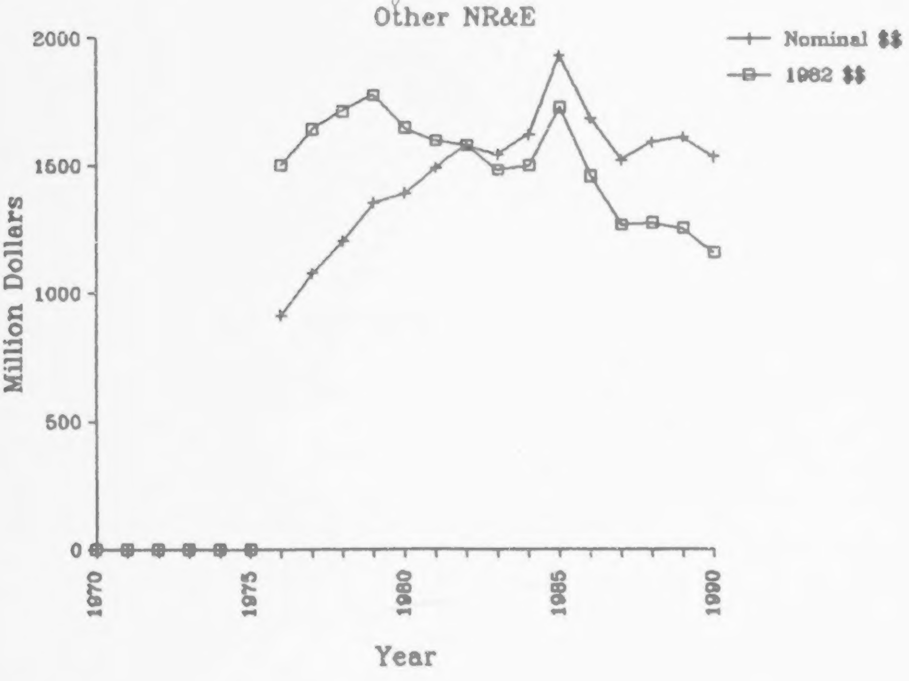


Figure 8.



Budget Impacts on Selected Agencies

Figures 9-12 show the projected impact of current budget plans on the Forest Service. In real spending terms, the graphs show a decline of over 33 percent in the total Forest Service program. Much of this is due to the elimination of virtually all of the assistance to non-federal forest land owners previously carried out through the State and Private Forestry program, coupled by the gradual decline of program effectiveness due to the impacts of inflation.

The Bureau of Land Management will also take a significant decline if the President's budget is accepted. The jump in budget between 1984 and 1985 represents the money appropriated to allow BLM to feed wild horses and burros, which Congress will not let them dispose of except through a cumbersome, expensive and slow adoption process.

Soil conservation cost-sharing programs would decline precipitously between 1985 and 1986 (if Congress accepts the current recission proposals of the President), then be phased out in 1987. Technical assistance (Shown in Figure 14) will stay fairly steady, but watershed programs will be phased out.

Congressional Prospects

The graphs show what the President proposes, not necessarily what will happen. Congress is constantly changing the scenario: the latest movement is a Senate Budget Committee proposal that greatly reduces defense spending, raises revenues, and lowers the proposed cuts in domestic programs. This has not been gladly received by the White House, so the process is currently at a standstill.

It is reported that the White House would prefer to wait until closer to election time than work on a compromise with the Congress. The likelihood is that the Gramm-Rudman deadline dates will, in fact, need to come (and perhaps go) in order to force the process. The Gramm-Rudman impacts on most natural resource programs would be somewhere in the range of a 20-25% cut between 1986 and 1987. It is not known how such a cut would compare to the President's proposed budget for all programs, but for most the Gramm-Rudman targets would be less of a cut than the Administration proposes.

One of the major changes in the Administration's projections could come within the next two weeks, as the deadline for Congressional approval of recission proposals passes. When the President sent the budget document to Congress in February, he proposed that major recissions take place in several conservation programs of the Soil Conservation Service and the Agricultural Stabilization and Conservation Service. If Congress does not approve the cuts -- and there is currently no sign that they have any intention of approving them -- that money goes back to the agencies some time in mid-April. If that happens, the 1986 spending projections of the budget documents will be off the mark for those programs.

Figure 9.

National Forest System

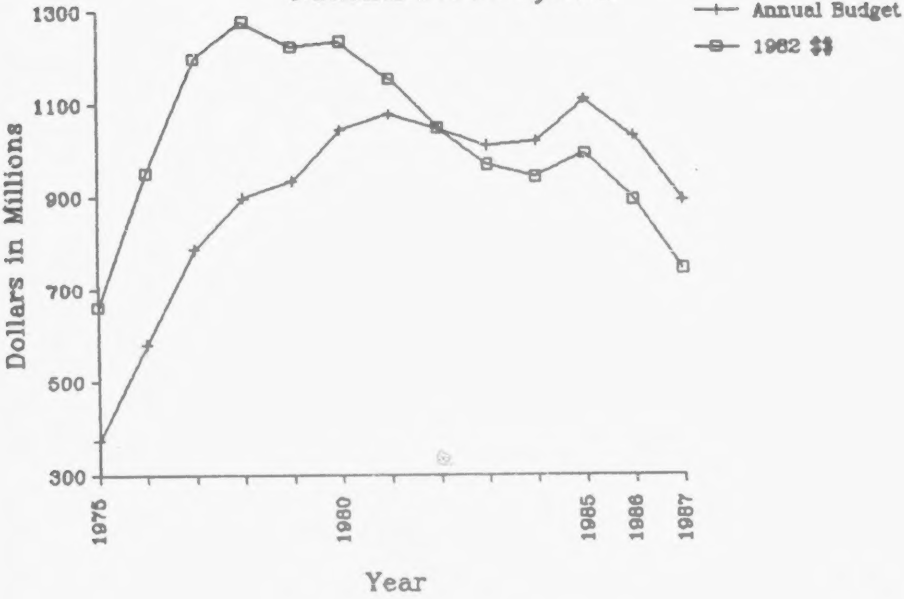


Figure 10.

Forestry Research

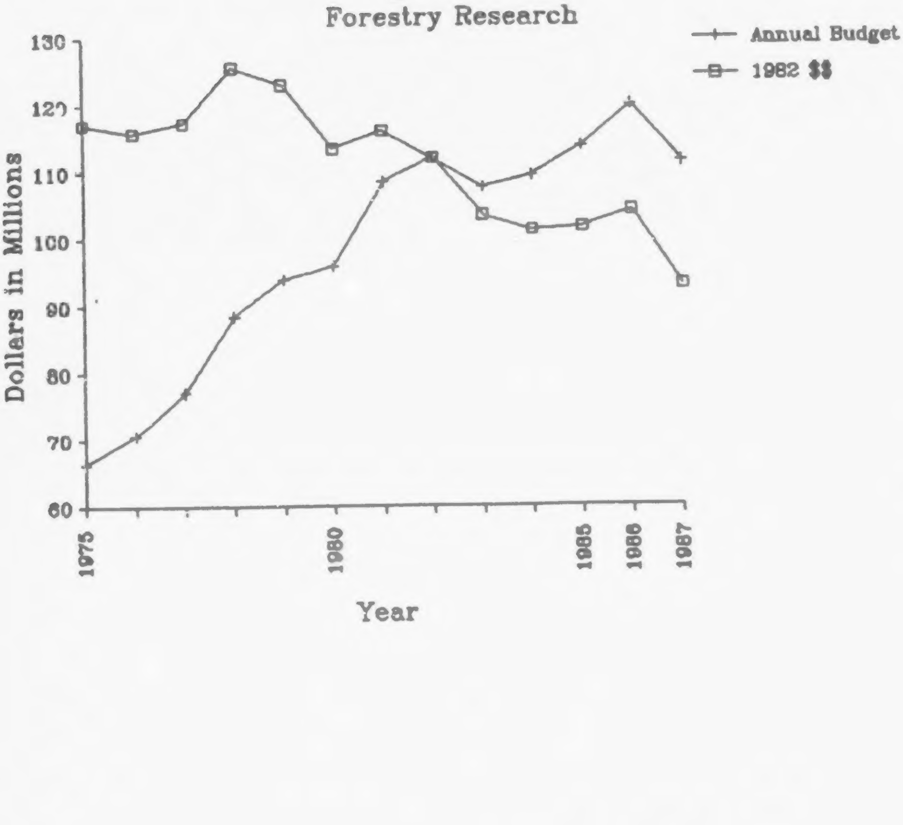


Figure 11.

State & Private Forestry

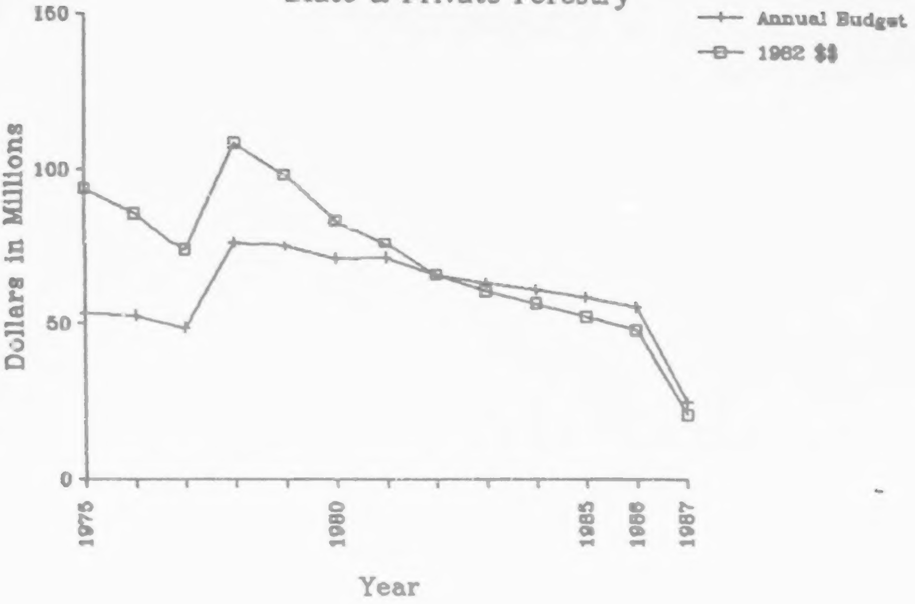


Figure 12.

F.S. Construction

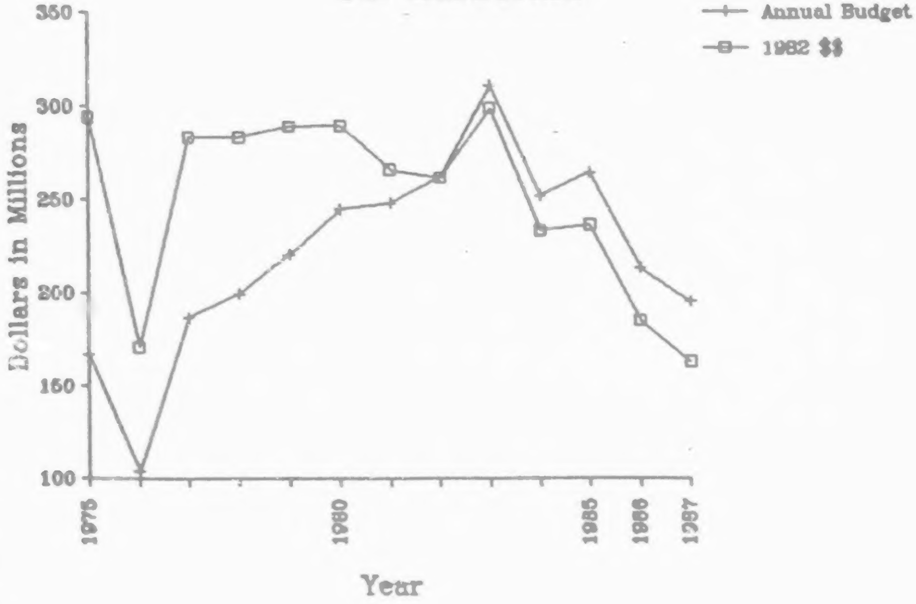


Figure 13.

Renewable Resource Mgmnt.

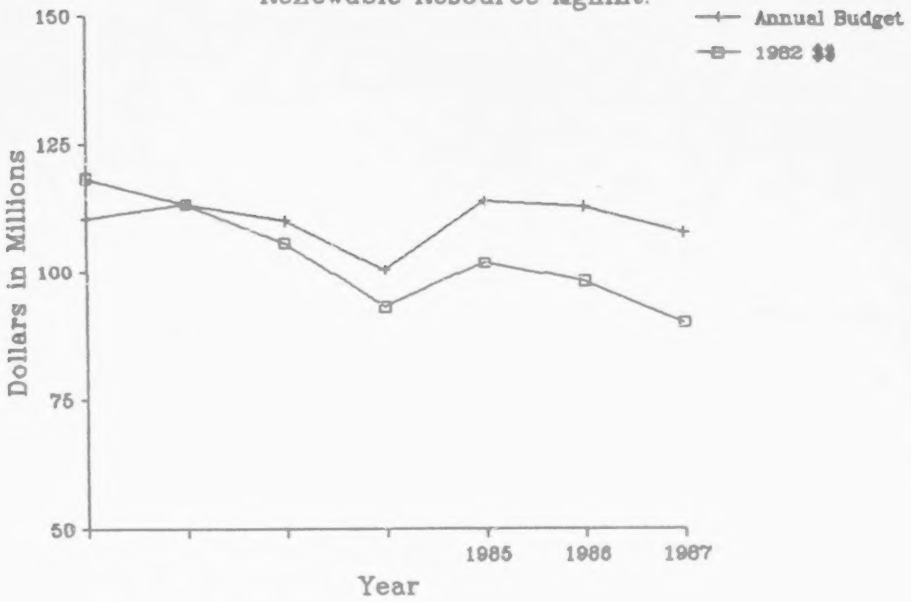


Figure 14.

SCS Conservation Operations

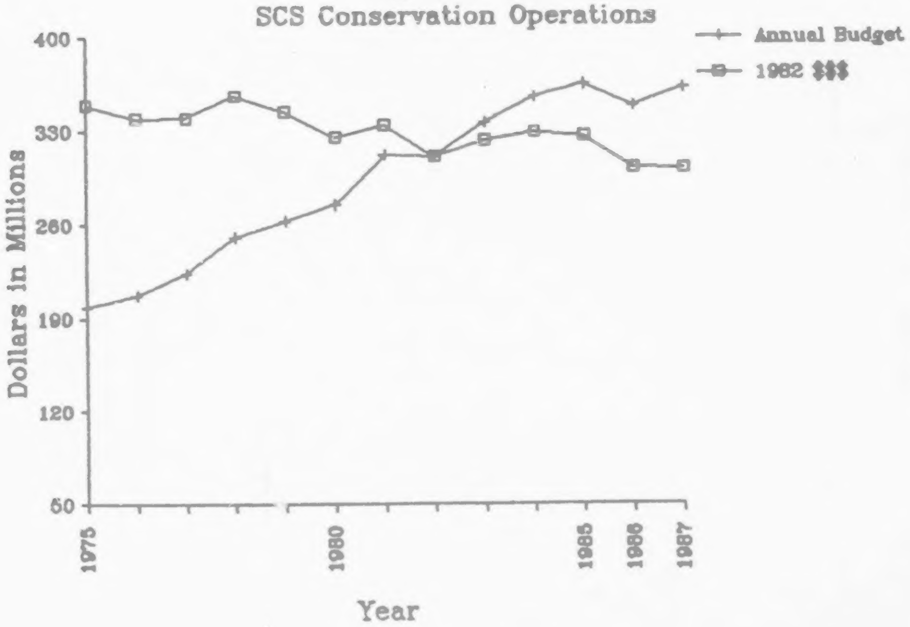


Figure 15.

Resource Conservation & Development

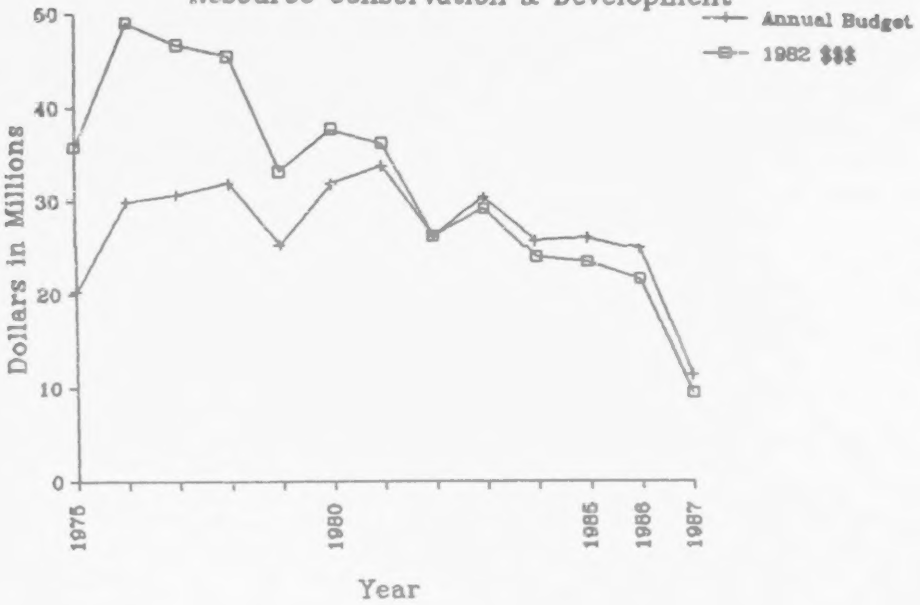
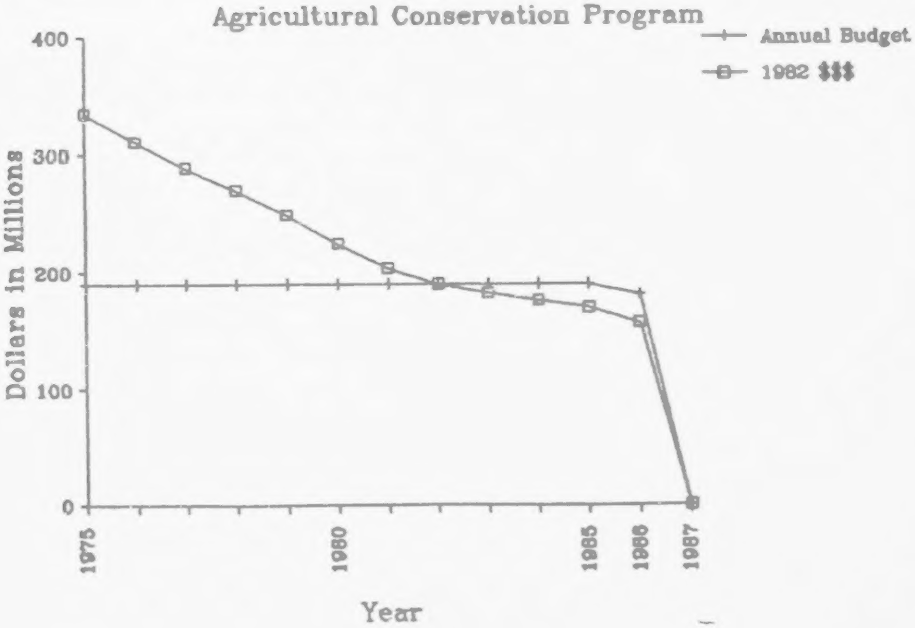


Figure 16.

Agricultural Conservation Program



Mr. WHITTEN. I would like to welcome the 4-H Club members here from Indiana. We have had several groups in and I am very proud of the 4-H Clubs throughout the Country. I belonged to a 4-H Club way back yonder. I forgot to measure my land in a contest, and I had a little less than an acre, so I did not win. But I have tried to make up for it since I have been here in Congress.

And, in that effort, we have had Mr. Myers' help and the help of other members of this Subcommittee. We think it is perhaps the greatest investment we have ever made.

I would like to tell a story that applies here. When I was 21, I was in the Mississippi Legislature. The most popular man with the younger members was an elderly man who had made a whole lot of money. And he told me then that, when he was a young man, he listened to older people. He got ahead faster than others because he did not have to stick his finger to the stove to learn that it burned. He listened to older people's advice.

But the point of it is that he said, now that I am older and I have made some money and am said to be wealthy, I am listening to younger people. I am learning the new methods. I am still getting ahead faster than the other folks.

So we are watching you young 4-H Club members and learning from you, as well as trying to pass on some advice. We welcome you here. And this Committee has been responsible for supporting the 4-H Club type work in our cities as well as in rural areas.

Mr. Myers may not have told you, but at one time the biggest 4-H Club in the country was in downtown Indianapolis. We put the word "type" in "4-H type work" so it would spread across the nation.

But we welcome you here and we are proud of your record. I am sorry to say that this year the budget recommends we cut out the money for 4-H work. But I am sure this Subcommittee will recommend that it be restored. We are glad to have you.

Mr. MYERS Well, thank you, Mr. Chairman, for the kind words you said about particularly our 4-H group here from Indiana, and the Chairman was citing here about his experience in the Mississippi Legislature, as well as his friend who took advice from elderly people until he got rich, then he started listening to young people. I do not know that that chronology is quite right but, at least, it worked for him. It has not worked for the rest of us though.

But I can say that the Chairman has been a great help to me through the years here as one of the—in comparison to his service, one of the newer Members of Congress. But my constituency back home, the young people back here, of course they have been born since I came to Congress.

But this Committee with all the experience that Chairman Whitten has still has these hearings every year. He can write the book, and he has. He has written books here on many different subjects. But we still have hearings because, every year, we learn something new. Even with all the wealth of experience that Chairman Whitten has, each year we learn something new from the witnesses that come before us, each one of the witnesses contribute something different each year and some new perspectives. So we appreciate them.

And I appreciate and thank you very much for your kind words that you said.

Mr. WHITTEN. With you making that statement, may I say for the record, it is apparent we work together on this Subcommittee.

WEDNESDAY, APRIL 16, 1986.

FORESTRY INCENTIVES—RURAL DEVELOPMENT

WITNESS

JOHN M. BETHEA, FLORIDA STATE FORESTER, AND CHAIRMAN OF THE LEGISLATIVE COMMITTEE, NATIONAL ASSOCIATION OF STATE FORESTERS

We turn now to Mr. John Bethea of the National Association of State Foresters.

Mr. Bethea, we are glad to see you again.

Mr. BETHEA Thank you, Mr. Chairman.

I appreciate the opportunity to be here and represent the National Association of State Foresters. And I can tell you, sir, that all of us in the Association appreciate you and what you are doing and have done, and what this Committee has done to continue to fund the critical programs of USDA, that affects our soil, our water and our renewable resources. So it is an opportunity that I welcome——

Mr. WHITTEN. Thank you very much.

Mr. BETHEA [continuing]. To speak to you again.

I have filed a statement for the record and I would just like to make a few comments on a few of the programs. Some of them are in my statement and some of them may not appear.

One of the programs that, of course, we are vitally interested in is the Forestry Incentives Program funded through ASCS. We think that is vital. We appreciate the good work that you have done with ACP in funding that. That put trees in the ground, that conserves soil and water. The conservation reserve now that will serve the constituency.

But the FIP program is intended to produce wood fiber and we need to produce more wood fiber for export and for domestic use.

I believe in the years ahead, I think the history will reflect this, that the United States is going to need to produce more of the Nation's wood fiber and more of the world's wood fiber. So we need it for export and we need it for domestic use.

The South has a tremendous amount of land that can and should be put into trees. We have got the soil, we have got the climate, we have got the species. So we hope that this Committee can continue the Forestry Incentives Program.

Another one that I would like to highlight briefly is the Rural Community Fire Protection Program. That is the funding that goes through the Farmers Home directly to small community fire departments. It leverages a tremendous amount of energy and money from volunteer fire departments.

For years, one of this Nation's, I think, greatest needs has been protection for rural improvements. But it is getting more so now.

For example, in Florida, from forest and wild land fires, we have never lost more than about six structures in any year. Last year, in one fire in one afternoon, we lost 130 homes valued from $75,000 to $125,000. We have already lost 130 homes this year. So this Rural Community Fire Protection Program is essential.

Our firefighters now have to be trained not only in wood fires but in structure fires, and we need to train these rural fire departments in the fighting of the woods fires. So we have got to work together. There is not enough money in the world to fund organizations to operate separately. We have got to work together and try to solve the Nation's problems.

Another program that we would like to lift up is the Renewable Resource Extension. That supports all the others, forestry programs, and it makes the money be used more effectively as does the McIntire-Stennis research.

You know, the U.S. Forest Service research is aimed primarily at national needs. We had a program in Florida that was not national, and it had to be dropped because other national needs took precedence. But the forestry schools, their research program under McIntire-Stennis, they can and do work more with State and regional problems.

So, in summary, Mr. Chairman, we hope that you can continue these vital programs.

Mr. **Whitten**. Thank you very much. And I agree with you. Unfortunately, we face financial problems. But what we spend on our own country is not wasted. And the bigger our problems, the more important it is that we take care of the base, which is our own country.

Thank you, sir.

Mr. **Bethea**. Thank you very much, Mr. Chairman.

[The statement of John Bethea follows:]

STATEMENT OF THE NATIONAL ASSOCIATION OF STATE FORESTERS BEFORE THE HOUSE APPROPRIATIONS SUBCOMMITTEE ON AGRICULTURE, RURAL DEVELOPMENT, AND RELATED AGENCIES

APRIL 16, 1986

Mr. Chairman and members of the Committee, I am John Bethea, State Forester of Florida and Chairman of the Legislative Committee of the National Association of State Foresters (NASF).

The members of the NASF are the directors of the state forestry agencies of each state. The primary responsibility of their agencies is to conduct forestry work for the public good on state and privately-owned forest land in their respective states. They work cooperatively with private, federal and other state agencies, organizations and individuals in directing and strengthening all forestry programs within their states.

We welcome this opportunity to appear before you to discuss the importance of the Forest Incentives Program (FIP), funded in the Agricultural Stabilization and Conservation Service budget; the Rural Community Fire Protection Program (RCFP), funded in the Farmers Home Administration budget; McIntire-Stennis Research Funding; and Renewable Resource Extension.

The Committee appropriated $15.75 million for FIP and RCFP last year--$12.5 million for FIP and $3.25 million for RCFP. For 1987, the Administration proposes a zero budget for both programs. NASF recommends $13 million be appropriated for FIP, and $3.5 million for RCFP--a total of $16.5 million.

STATE AND PRIVATE BUDGET
(Millions)

	1985 & 1986 Appropriation	1987 ADM.	1987 NASF REQUEST
Forestry Incentives Program (FIP) (ASCS)	12.5	-0-	13.0
Rural Community Fire Protection (RCFP) (FmHA)	3.25	-0-	3.5

FORESTRY INCENTIVES PROGRAM (FIP)

A projected shortage of wood fiber and the need for better fire protection for America's growing rural communities are two issues about which the Association is deeply concerned. Both of these problems touch many Americans today, but millions will be adversely affected in the future unless we effectively address these problems now.

The projections of a shortfall in wood vary but forestry experts agree that by the turn of the century we will probably be facing a demand for wood that exceeds supply by billions of board feet annually. It requires some 10,000 board feet to build the average 1,800-square-foot home, so thousands of homes will not be built unless steps are taken to assure an adequate supply of wood. The shortfall will also have a profound effect on other construction and industries using wood fiber.

Too many private landowners harvest their timber without making the necessary investment to reforest the cutover area. Many lack the capital required for this type of expenditure and are reluctant to borrow money because of the long-term nature of a forestry investment. In most cases, they're faced with the necessity of repaying the loan in a few years, while having to wait 20-25 years for a return on their investment.

The FIP Program, which Congress approved in 1974, helps offset the obstacles to long-term investment in forestry which include high interest rates, long-term cash commitments and protection of plantation investments. Unfortunately, the situation has reached the point where we not only need cooperative programs like FIP, but also need tax credit incentives and technical assistance to encourage the 7.8 million owners of private nonindustrial forest land to plant their unproductive acreage in trees for the future. These private landowners own or control nearly 60 percent of our domestic commercial timberland, and account for about 45 percent of the roundwood timber supply. By 2030, these lands are expected to provide almost 60 percent of the total roundwood supplies. The USDA Forest Service estimates that some 1,000,000 acres a year in the South alone are reverting from productive pine timber to brush and low quality hardwoods. The Forest Service reports that the major cause is inadequate or nonexistent regeneration following harvest.

The Conservation Reserve Program and the Agriculture Conservation Program do have an effect on forestry, but their primary mission is to conserve soil and water. While they will have long-range benefits on forestry, they will have no effect on many acres of forest lands that have been harvested and then left idle.

The Packwood Bill that provides for a 10 percent tax credit and allows for the amortization of the remaining reforestation expenses is needed. It does not, however, help the small landowner who needs funds to plant trees and perform the other work needed to grow timber.

The Forestry Incentives Program needs to be continued so that the projected wood fiber shortfall, just 15 years in the future, will be lessened. The National Association of State Foresters requests approval of a budget of $13 million for the 1987 fiscal year.

RURAL COMMUNITY FIRE PROTECTION (RCFP)

The American people love the outdoors. Now there is a developing trend to move their homes--and their businesses as well--out of the cities and into rural areas and more natural surroundings. This trend is causing great concern in the rural areas because this area--generally referred to as the urban-rural interface--is something of a "no man's land" when wildfires threaten lives and property.

Last year, wildfires did extensive damage in the eastern states from Florida to Maine. Idaho, Nevada and California were also hard hit. This year, wildfires have been widespread from Texas and Oklahoma to the Virginias and the Carolinas, into Georgia and Alabama.

It is no longer a case of simply protecting the natural resource. Now firefighters are finding themselves in the position of having to protect structures built in close proximity to flammable, native vegetation.

This problem has existed throughout the West and especially in California for many years. Now all up and down the Eastern Seaboard from Florida's palmettos to Maine's pine forests, structural fire losses are increasing dramatically as more homes and businesses are built on lands surrounded by natural fuels. Major loss of life under these circumstances is not only possible, it is inevitable.

There doesn't appear much likelihood of this trend being reversed, so fire management techniques must be changed in order to suppress the small, fast-moving single and multiple fires that are the main threats to the people and structures in these areas. But these changes must be made on a nationwide basis.

Fire personnel who are accustomed to fighting wildland fires are generally inadequately prepared to fight structural fires. Municipal fire departments usually lack the training and equipment necessary to fight wildland fires. The special nature of fires in the urban-rural interface frequently forces firefighters to adopt suppression tactics for which they are neither trained nor equipped.

The Rural Community Fire Protection Program provides financial and technical assistance to train, organize and equip local, rural fire departments. The National Volunteer Fire Council reports there are about 1.5 million volunteer firefighters in more than 27,000 volunteer fire departments who are responsible for the fire protection of their local communities.

Fire protection for improvements in rural areas will depend more and more on volunteer and small community fire departments. Funds are badly needed to train them in the techniques of fighting wildland fires as well as structural fires, to prevent increased loss of property and life.

To better protect the urban-rural interface, the National Association of State Foresters recommends the 1987 appropriation for RCFP be approved at $3.5 million.

MCINTIRE-STENNIS RESEARCH FUNDING

Underlying the forest development and protection responsibilities of the state forestry agencies is the need to generate new technology and methodology which can increase the efficiency of forest management and development, and reduce loss of forest values through insect and disease and fire.

The state forestry agencies depend primarily on the state universities and the U. S. Forest Service for the research and technology support base. While certainly many research needs are national in scope and deserve a national approach, the individual schools play a major role in emphasizing the research and technology needs in their individual states and regions.

We are aware that the total support for the federal/state forestry research has decreased significantly in inflation-adjusted dollars concurrently with increasing needs for more sophisticated forest and forest products technology. The Association is highly concerned about this trend which adversely impacts on the effectiveness of state forestry agencies to bring about cost-effective forest development and protection technology.

NASF therefore recommends forest research funding (McIntire-Stennis) for the universities for 1987 be continued at the current 1986 level in order to develop the needed forest technology in our respective states.

RENEWABLE RESOURCE EXTENSION

Targeting is recognized as an effective way to direct limited funds to priority needs. The Renewable Resource Extension appropriation is targeted to support the nation's need for a continuous supply of forest resources. It is a major factor in the transfer of needed forest technology to nonindustrial private forest landowners (who own most of the commercial forest land in the United States) as well as industry and business enterprises involved with management and utilization of forests.

The NASF recommends 1987 funding for this important program at the current level of $2.4 million.

WEDNESDAY, APRIL 16, 1986.

MARKET DEVELOPMENT PROGRAM

WITNESSES

C.P. OWEN, JR., ROBINSONVILLE, MISSISSIPPI
A. JOHN MAGUIRE, COTTON COUNCIL INTERNATIONAL
NELSON DENLINGER, U.S. WHEAT ASSOCIATES

Mr. WHITTEN. Mr. C.P. Owen is next.

Mr. OWEN. Mr. Chairman, my name is C.P. Owen. I am a farmer from Robinsonville, Mississippi, and I produce cotton, rice, soybeans, wheat and feed grains.

Mr. WHITTEN. Well, we are glad to have you here. And, may I say, Robinsonville has been in my district a long, long time. I was District Attorney before coming here. So glad to have you here and glad to hear from you.

Mr. OWEN. Thank you, sir.

I will summarize the most important points of our submission but request that the written testimony be entered in the record.

I am here today on behalf of the U.S. Agricultural Export Development Council whose 67 members are better known as the cooperators, and who have established efficient market development programs in over 100 countries. They represent a wide range of agricultural production interests.

Your Committee has been very supportive of foreign market development in the past. And we want you to know that we greatly appreciate that support.

The United States in the 1980s faces keen competition in virtually all industries. It is the same way in agriculture. We must face the hard fact that there are no guaranteed markets for U.S. agriculture. This country is going to have to scrape for its share of world food and fiber markets.

The 1980s is also a decade of opportunity in which we must renew our commitment to agriculture second to none, and in which we must reassert our historic leadership.

While the challenge facing cooperators and the U.S. Government is greater than ever before, the funding tools with which to carry on this effort are in jeopardy. The President's budget proposes an 18 percent reduction in USDA budget and a 32 percent cut in foreign market development. Our total 1986 market development activities amount to $37.5 million, and the final allowance of $18.5 million for 1987 represents a 50 percent reduction.

The implementation of such an abrupt reversal in funding carries serious implications for program activities which will have to be cut drastically.

We doubt that is what Congress had in mind for the market development program. Cooperative funding is not a major part of even the Department of Agriculture's total budget. The issue, however, is not just the amount of money; there is also the priority of market development. Congress has come down clearly and squarely in support of agricultural market development in the past. And we find it hard to accept the budget as it suggests that market development is not a high priority. We doubt that Congress will either.

New agricultural legislation last year provided for the tools for expanding export sales. We must use these tools to take advantage of opportunities in today's market.

The new intermediate credit guarantee program should be implemented quickly. Vigorous use needs to be made of P.L. 480 and for additional programs like GSM-102 credit guarantees. The new export bonus program deserves special attention.

Our export potential at the moment is far greater than the reality. Last year's export value was the lowest since 1979. We hope we have hit the bottom.

The Foreign Agricultural Services Cooperative Program has evolved into a productive partnership for opportunity and market growth. It brings together the efforts and investments of producers, the public sector, and so-called third-party contributors, often the private industry and/or public sector in target countries.

We believe agricultural exports are important to the economic security of the U.S., and we believe the program is a worthwhile investment and one that calls for continued commitment.

The 1986 budget request included no additional funds for expansion of cooperative programs, and FAS has drawn down its reserves. Producer groups are also facing increasing challenges to maintain their share of market contributions.

We have the opportunity to rebuild our lost market share and rebuild our competitiveness. If we do the market development and increase our sales, we will see a payoff in increasing demand that must lead to higher prices and lower Federal outlays.

The opportunity exists for market building. We can make more sales for the United States and U.S. agriculture can compete with any agricultural industry on Earth, given a fair chance.

With a U.S. agricultural policy that stresses demand, expansion and market growth, and with the tools to expand agricultural exports and the willingness to use them, the partnership between producers and the public through the FAS Cooperative Program has been a successful one.

I ask this Subcommittee to make sure the partnership continues.

Thank you, Mr. Chairman

Mr. WHITTEN. We are very glad to have you before us. And as you know, I have been close to members of your family back through the years.

Mr. OWEN. Yes, sir.

Mr. WHITTEN. And I have enjoyed the relationship and friendship.

We on this Committee can fully appreciate the special efforts that are made in the new farm legislation. We support the conservation reserve that they established. But it should be in addition to and not in substitution for.

Agriculture's main problem and when I pointed this out to the President in 1982, and again about six weeks ago—we have had American agriculture financing our foreign policy. We had embargoes in '73, '74, '75 and '80. And for the last four years, we have not been offering our farm commodities in world trade at competitive prices. The law provides for that. It has for years and it works.

Under that law the farms had a target to work toward, and the farmer had a loan at the beginning of the year. CCC sold at a discount, whatever it took to match world prices.

The reason for that is because of our minimum wage laws, the right of labor to strike, and the right of industry to add in their profits. Since World War II, labor and industry have increased their take of the consumer dollar from 49 percent to 73 percent. However, the farmer who has to buy from these sectors with increasing costs has seen less his share of the dollar reduced from 51 percent down to 27 percent.

We have the PIK program which this Committee had to pick up the cost for. The record of the PIK program shows that many folks got wealthy because of huge payments. But in the overall, farmers lost 11 percent of their overseas sales to our competitors. It did not cut world supply, it just moved the market to our competitors.

In this country, under PIK we paid farmers to grow cotton to pay themselves for not growing cotton. The $17 billion cost was charged to the farmers, yet what they did was lose 11 percent of their export markets.

So, with that kind of situation, we have pending before the House now, which I wrote with the support of this Committee, a provision to call on the Department to go back to the old program where folks made money and bought land, and to get away from the program today where they are losing land right and left. According to the press, we have had 60 or 70 suicides as a result.

I talked to the head of the FmHA yesterday. He is requiring now that the farmer pay all that he owes, including the debt he acquired during the period when we would not export what he produced. If we wanted to punish Russia, we put an embargo on exports to Russia and the farmer suffered. It just gave our competitors the market he should have had.

When Mr. Butz became Secretary, he did not use the CCC, which was set up for the purpose of expanding exports. But he did use private industry and sold to Russia.

You know, if people trade, they usually get along better than if they do not have any contact with each other. So, as I pointed out, with regard to the new conservation reserve program, I did write some restrictions to keep it from being substituted for the existing conservation programs.

The purpose was not to cripple the new program but, not let it be a substitute for the old ones.

So we certainly have a great interest in what you propose, but it should be in addition to and not a substitute for.

I was in the House years ago when we came up with Public Law 480. I voted for it. I said I hope to goodness it does not ever get to be a substitute for normal sales.

Now, you come from a small community and you understand that the best way in the world to sell anything is to lay on the counter and say "come and get it." If we would do that, we would have folks in these foreign countries helping us move it. Well, if you let them buy it at reduced prices, they would help move it. Why folks do not see that, I do not know.

If we would just lay it out there and say "come and get it," folks in these foreign countries would be coming over here to buy. Not only that, they would be getting on their own authorities to import it. It worked before. So I am urging that we get back to what worked before and add to it these new approaches.

Mr. Owen. The Farm Market Development Program has been in effect for 30 years, and it has gone through all these different periods. And we are seeking at this time the funding that we have enjoyed in the past.

Mr. Whitten. I do not know what we can do on the funding. When I say that, I might point out here that this is what we get from the Office of Budget and Management. This is what is before us in the 1987 budget:

Programs eliminated, $4,700,000,000; Programs reduced, $2,318,000,000; and User fees, which they cannot get anybody to introduce, $534,000,000. Every year for the last 20 years, they have proposed user fees and never got it. And rescissions, which means they hold it up for three months, $1,056,000,000.

Now, that is what is before us. OMB wants to cut out money for 4-H Clubs, and wants to cut out money for Extension, except for a barebones amount. Then, in addition, we have the Gramm-Rudman forcing another 4.3 percent reduction.

So we are going to do the best we can. And again I say that we just can not afford to let the new conservation reserve be a substitute for existing programs.

I hope you will give my regard to you family and mutual friends.

Mr. Owen. Thank you, Mr. Whitten. Thank you very much.

[The statement of C.P. Owen, Jr. follows:]

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DC

U.S. AGRICULTURAL EXPORT DEVELOPMENT COUNCIL
600 Maryland Avenue, S.W., Suite 510, Washington, D.C. 20024 (202) 554-9538

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STATEMENT OF MR. C.P. OWEN, JR.

on behalf of the

U.S. AGRICULTURAL EXPORT DEVELOPMENT COUNCIL

before the

SUBCOMMITTEE ON AGRICULTURE, RURAL DEVELOPMENT
& RELATED AGENCIES

COMMITTEE ON APPROPRIATIONS

U.S. HOUSE OF REPRESENTATIVES

April 16, 1986

STATEMENT OF MR. C.P. OWEN, JR.
on behalf of the
U.S. AGRICULTURAL EXPORT DEVELOPMENT COUNCIL
before the
SUBCOMMITTEE ON AGRICULTURE, RURAL DEVELOPMENT & RELATED AGENCIES
COMMITTEE ON APPROPRIATIONS
U.S. HOUSE OF REPRESENTATIVES

April 16, 1986

Mr. Chairman, my name is C.P. Owen, I am a farmer from Robinsonville, Mississippi where I produce cotton rice, sorghum, soybeans and wheat. I am also a member of the Board of the Rice Council for Market Development.

It is an honor to represent the U.S. Agricultural Export Development Council before this subcommittee. The USAEDC's 67 members participate in the foreign market development programs of the Foreign Agricultural Service. Most of our members are producer and agribusiness organizations, predominantly non-profit, who over 30 years have established efficient market development networks in over 100 countries.

The United States in the 1980's faces keen competition in virtually all industries. From steel to semiconductors, our nation's businesses find themselves in a world where the competition is tough and not always fair. It's the same way in agriculture. As we set our sights on the end of the century and beyond, we must face this hard fact: There are no guaranteed markets for U.S. agriculture. This country is going to have to scrap for its share of world food and fiber markets.

Yet in this ever-more-competitive world, the opportunities are breathtaking. The aim of the market development projects our members undertake is to grasp those opportunities ... to expand the world's willingness and desire to consume the products U.S. agriculture has to offer.

The 1980s are a decade of opportunity -- and an opportunity is a question mark. Will we renew our commitment to an agriculture second to none? Will we reassert our historic leadership in the world's most basic industry?

Funding Outlook for Market Development

While the challenge facing cooperators and the U.S. government is greater than ever before, the funding tools with which to carry on this effort are in jeopardy. USDA programs are being reduced by 18 percent but foreign market development faces a 32 percent cut. Our total 1986 market development activities amount to $37.5 million, and the final allowance of $18.5 million for 1987 represents a 50 percent reduction.

If the Gramm-Rudman-Hollings reductions are implemented, it is also expected that cooperator programs will be reduced by 50 percent in FY1987. Beyond FY1987, the Gramm-Rudman-Hollings reductions could phase out U.S. Government funding for cooperator programs altogether. This approach would hardly be consistent with the strong support Congress has historically provided for this modest but important program, and it would also undermine the mandate of the 1985 farm bill to increase agricultural exports.

The implementation of such an abrupt reversal in funding for the cooperator programs will carry serious implications for program activities. In the case of cooperators with overseas offices, there will need to be a scaling back of offices and personnel. This means we will need to have overseas staff come home early. We also need to recognize that with the value of the dollar now declining, our budgets will buy less in terms of overseas activity.

We doubt that this is what congress had in mind for the market development program. Cooperator funding is not a major part of even the Department of Agriculture's total budget. However, the issue is not just the amount of money, it is also the priority of market development.

Congress has come down clearly and squarely in support of agricultural market development in the past. This proposed budget suggests that market development is not a high priority and that we should "cut and run". We find it hard to accept that view, and we doubt that congress will either.

The 1985 Farm Bill: Tools for Trade Expansion

This Congress wrote new agricultural legislation last year. What emerged was not perfect and did not perfectly satisfy anyone. That shouldn't be surprising. The new law does, however, provide the tools for expanding export sales. We must use the tools efficiently and fully if we want to take advantage of the opportunities in today's world market.

* The new intermediate credit guarantee program had wide support throughout the agricultural community. It should be implemented quickly, and we urge this subcommittee to monitor its progress closely. Not only can intermediate credit provide a more favorable payment schedule for middle-income customers, it can and should also be used to finance infrastructure in developing nations -- storage facilities for U.S. grains, for instance.

* The P.L.480 Food for Peace program, begun in 1954, has become doubly important in light of the continuing Third World debt crisis. The new farm law makes useful reforms in the program, among them new authority for a portion of local-currency repayments to be used for private sector market development.

* Vigorous use of traditional programs like GSM-102 credit guarantees is needed. Their worth is proven, and the level should be continued at $5 billion in the face of strong market competition. The

FY1987 budget again proposes a five percent origination fee that would defeat the purpose of the GSM-102 program as our foreign customers would find it too expensive to use. The five percent origination fee would increase the cost to the buyer by an estimated additional 20 cents per bushel for wheat and 15 cents per bushel for feedgrains. A 25,000 ton sale would cost an extra $183,500 for wheat and $147,000 for feedgrains. Currently the guarantee fee ranges from one-third to two-thirds of one percent. An increase to five percent would make it impossible for the U.S. to compete in world markets.

* The new export bonus program deserves the attention of Congress, as does the mandate for $325 million, since reduced to $110 million, in export assistance to combat unfair foreign trade practices. There are plenty of unfair policies out there, from European export restitutions for wheat and flour, to Canadian transportation subsidies of $1 per bushel on wheat exports and Argentine incentives to dump soybean meal. The question is, will the United States use its new authority to fight these subsidies and bring other nations to the bargaining table? We hope you will insist that the Congressional mandate be carried out.

* The farm bill also calls for experimental barter initiatives. These programs are promising because of the foreign exchange constraints on many of our customers. We suggest the subcommittee promote an East Bloc country as one partner in the barter experiment. Not only might such a barter arrangement contribute to improved international relations, it would help develop the demand potential in the centrally planned economies -- a potential most analysts agree is considerable.

It is of great concern that many of these initiatives are on hold because of opposition from the State Department and others. Legislative efforts are being undertaken to weaken these provisions at the behest of Canada and Australia. We would urge that these initiatives be used to expand markets and also send a message to subsidizing countries. Taking these tools away before the negotiations are successful would likely assure failure of the process.

The Cooperator Program: The Need has Never been Greater

At the moment, as everyone in this room knows, our export potential is far greater than the reality. U.S. agricultural exports have hit what we have to hope is the bottom of a steep downward slope. Last year's export value was the lowest since 1979 -- and at the moment, wheat exports are running at only about half last year's pace, while corn exports are 20 prcent below last year at this time.

New price support mechanisms in the 1985 farm bill may help reverse the export downtrend, but it would be unrealistic to expect price support policy to carry the whole burden of demand expansion: Price is not the sole determinant of demand.

The FAS cooperator program has evolved over 30 years into a productive partnership for opportunity and market growth. It brings together the efforts -- and investments -- of producers, the public and so-called "third-party" contributors, often private industry in target countries.

To decide whether this partnership is worthwhile, you really only have to ask: Are agricultural exports worthwile? Besides being essential for a healthy agriculture, food and fiber exports also enhance the U.S. trade position. The 1984 U.S. trade deficit was $105 billion, but without that year's agricultural trade surplus, the total shortfall would have been $125 billon instead. That would have meant more lost jobs, lower GNP and a less healthy economy.

We believe agricultural exports are important to the economic security of the United States, and we believe the 30-year record of FAS's cooperator program speaks for itself. The program is a worthwhile investment, but one that calls for continued commitment.

The 1986 budget request included no additional funds for expansion of cooperator programs. When we testified last year, we explained we'd been working with FAS to allocate resources to those markets and programs which offered the best return on everyone's investment -- the most economically sensible opportunities for creating maximum market potential.

FAS has drawn down its reserves in the past year, and so the time has come when an increased federal commitment is necessary to take advantage of the market potential that exists in the 100 countries we serve. Producer groups are facing increasing challenges to maintain their share of funding contributions: Today's low farm prices encourage more producers to seek refunds in state checkoff programs, while for some commodities, increased use of the price support loan program removes many millions of bushels from the checkoff funding system altogether.

The President's budget for FY1987 cuts some $13 million in market development funding. With the increasingly competitive market in most commodities, and given the need to maintain ongoing projects particularly in developing countries, we believe it is essential to restore this $13 million to the market development budget if the nation intends to pursue a farm policy that is firmly oriented toward markets. Indeed, a modest $2 million increase beyond this amount would allow Cooperators and FAS to proceed with a vigorous effort consistent with the needs in today's market.

The biggest reason, though, for an increased commitment to market development is the 1985 farm bill itself. It gives us a chance to rebuild our lost market share, to rebuild our competitiveness. The chance is there, but the choice must be made: Will we do the legwork, will we hustle for sales ... will we develop markets? We must not pass up the opportunity afforded us by the new farm bill. We must not abandon an investment program whose value has been well documented.

If we do the legwork of market development and increase our sales, we'll see a payoff -- and not only in improved producer income. Per-bushel federal budget exposure was significantly increased for many crops in the new farm bill. Low prices, more than ever, will mean high government costs. The ultimate answer to this quandary is increasing demand. That will lead to higher prices and lower federal payments.

Outlook and Opportunity

Today, some people are preaching Malthusianism in reverse. Instead of predicting famine, they forsee a feast: They note the very real production gains in many Third World countries, and conclude that the world has become self-sufficient and well-fed. Then they take further note of the competitive problems U.S. agriculture has faced in this decade, and assert that the world really doesn't need American food and fiber producers.

We believe the reverse-Malthusians are just as wrong as Malthus himself has so far proven to be. The truth is, the world can be fed ... but it's going to take U.S. agriculture to do it. We should recall that some so-called experts were just a few years ago projecting famine and starvation.

Many countries can grow the same crops we grow, and some of them are able to grow some crops more efficiently than we can. From the longer view, however, nobody else has the combination of climate, soil, technology, private-sector synergy, infrastructure and farm-to-port efficiency that the U.S. agriculture industry has.

USDA's January 13 report on the world grain situation sees the possibility of increased demand, not world self-sufficiency. That means the opportunity exists for market-building. We can make more sales for the United States, and U.S. agriculture can compete with any agricultural industry on earth, if given a fair chance.

The United States must make a commitment to being a competitive agricultural exporting nation. That means --

- A rational fiscal policy, and a monetary policy that's export-oriented, to produce a reasonably valued dollar;
- Guarantees of our reliability as a supplier;
- Tough, coordinated action to remove foreign trade barriers and unfair export subsidies;
- A U.S. agricultural policy that stresses demand expansion and market growth; and
- Having the tools to expand agricultural exports and the willingness to use them.

The last two items on that checklist obviously have to include market development. The partnership between producers and the public through the FAS cooperator program has been a successful one. We can be proud of the record, and proud that producers are doing their very best to keep up their end of the bargain. I ask this subcommittee to make sure the partnership continues.

LIST OF STATISTICAL INFORMATION ENCLOSED

I. Historical Summary - Value of U.S. Foreign Trade and Trade Balance FY 1970-1985

II. Expenditure of Federal Funds and Cooperator Contributions and total agricultural exports FY 1971-1985

III. USDA and Cooperator Market Development Expenditures expressed as a percentage of total agricultural exports FY 1971-1985

IV. Agricultural Exports and Market Development Expenditures of the United States and its Principal Competing Countries

HISTORICAL SUMMARY
VALUE OF U.S. FOREIGN TRADE AND TRADE BALANCE

FISCAL YEARS 1970 - 1985

FISCAL YEAR	U.S. EXPORTS				U.S. IMPORTS				TRADE BALANCE		
	AGRICULTURAL	NON-AGRICULTURAL	TOTAL	% AGRICULTURAL OF TOTAL	AGRICULTURAL	NON-AGRICULTURAL	TOTAL	% AGRICULTURAL OF TOTAL	AGRICULTURAL	NON-AGRICULTURAL	TOTAL
	Million Dollars			%	Million Dollars			%	Million Dollars		
1970	6,598	34,337	41,295	15	5,686	33,379	390,655	14	+1,272	+958	+2,230
1971	7,955	35,928	43,883	18	6,128	38,744	44,872	13	+1,827	-2,816	989
1972	8,242	36,633	44,875	18	5,936	45,926	51,862	11	+2,306	-9,293	-6,987
1973	14,984	47,759	62,743	23	7,737	57,521	65,258	11	+7,247	-9,672	-2,515
1974	21,559	69,423	90,982	23	10,031	81,995	92,026	10	+11,528	-12,572	-1,044
1975	21,817	83,178	104,995	20	9,435	89,251	98,686	9	+12,382	-6,073	+6,309
1976	22,742	89,047	111,789	20	10,492	103,743	114,235	9	+12,250	-14,696	-2,446
1977	23,974	95,144	119,118	20	13,357	129,061	142,418	9	+10,617	-33,917	-23,300
1978	27,289	104,270	131,559	20	13,886	152,095	165,981	8	+13,403	-47,825	-34,422
1979	31,979	135,639	167,618	19	16,186	177,424	193,610	8	+15,793	-41,785	-25,992
1980	40,481	169,753	210,234	19	17,276	219,305	236,581	7	+23,205	-49,552	-26,347
1981	43,788	185,415	229,203	19	17,218	237,469	254,687	6	+26,570	-52,054	-25,484
1982	39,094	176,311	215,405	18	15,346	233,488	248,834	6	+23,748	-57,177	-33,429
1983	34,769	159,373	194,142	17	16,271	229,438	245,709	6	+18,498	-70,065	-51,567
1984	38,027	170,614	208,041	18	18,916	295,088	314,004	6	+19,111	-125,074	-105,963
1985	31,185	179,252	210,437	14	19,740	313,723	333,463	5	+11,445	-134,471	-123,026

Source: 1970-1985 USDA, ERS. U.S. Foreign Ag. Trade Statistical Report Fiscal Year 1985, Page 1.

2/5/86
(1510P pg 49)

FISCAL YEAR EXPENDITURES OF FEDERAL FUNDS AND
COOPERATOR CONTRIBUTION AND TOTAL AGRICULTURAL EXPORTS

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	FEDERAL FUNDS					FUNDS DISTRIBUTION		MARKET DEVELOPMENT COSTS		
FISCAL YEAR	PROJECTS	FAS	TOTAL	COOPERATOR FUNDS	TOTAL FUNDS	FEDERAL	COOPERATOR	AGRICULTURAL EXPORTS	FEDERAL	COOPERATATOR
	$1,000					$ of Total		$Million	$ of Export Value	
1971	8,847	858	13,705	18,613	32,315	42	58	7,955	.11	.23
1972	10,054	1,730	11,874	20,605	32,389	36	64	8,242	.12	.25
1973	10,045	930	10,975	22,112	33,087	33	67	14,984	.07	.15
1974	10,234	658	10,892	23,342	34,234	32	68	21,559	.05	.11
*1975	11,739	830	12,659	26,997	39,566	32	68	21,817	.05	.12
1976	10,922	796	11,718	24,158	35,876	33	67	22,742	.05	.11
1977	11,719	798	12,517	29,420	41,937	30	70	23,974	.05	.12
1978	13,926	879	14,805	35,331	50,136	30	70	27,289	.05	.13
1979	16,709	963	17,672	39,660	57,332	30	70	31,979	.05	.12
1980	18,778	1,165	19,943	47,373	67,316	30	70	40,481	.05	.12
1981	20,195	1,014	21,209	51,502	72,711	29	71	43,788	.05	.12
1982	20,641	878	21,519	54,804	76,323	28	72	39,094	.06	.14
1983	23,373	869	24,242	65,790	90,032	27	73	34,769	.07	.19
1984	27,429	1,501	28,930	61,271	90,201	32	68	38,027	.08	.16
1985	31,073	1,213	32,286	70,328 (Est.)	102,614	31	69	31,185	.10	.23

* Cover 15 month period.

FOOTNOTES:

(1)	FAS Expenditures for Cooperator Projects.
(2)	FAS Expenditures for own projects.
(3)	Column (1) + (2).
(4)	Cooperator expenditures from own and related funds including foreign.
(5)	Total expenditures for foreign market development.
(6) & (7)	Share of total expenditures by source.
(8)	Value of total U.S. exports of agricultural commodities.
(9) & (10)	Market development costs as percent of value of total exports.

NOTE: If forest products are included, the agricultural exports for 1982 would total $41.9 billion, and the Federal and cooperator market development costs would be .05 and .13 percent respectively; 1983 would total $37.6 billion, and the Federal and cooperator market development costs would be .06 and .16 percent, respectively; 1984 total $40.7 billion and the Federal and cooperator market development cost would be .07 and .15 respectively; 1985 total $33.8 billion and the Federal and cooperator market development cost would be .10 and .18.

Source: FAS/CMP/EPD/Pdb 2/5/86
(1510P pg 48)

USDA AND COOPERATOR MARKET DEVELOPMENT EXPENDITURES EXPRESSED AS A PERCENTAGE OF TOTAL AGRICULTURAL EXPORTS

FISCAL YEARS 1971 - 1985

FISCAL YEAR	EXPORTS ($ billions)	MARKET DEVELOPMENT 1/ ($ thousands)	PERCENT OF EXPORTS
1971	8.0	20,569	0.26
1972	8.2	18,785	0.23
1973	15.0	18,536	0.12
1974	21.6	18,600	0.09
1975	21.8	21,656	0.10
1976	22.7	21,593	0.10
1977	24.0	25,069	0.10
1978	27.3	30,000	0.11
1979	32.0	33,935	0.11
1980	40.5	39,748	0.10
1981	43.8	42,344	0.10
1982	39.1	49,594	0.13
1983	34.8	54,448	0.16
1984	38.0	59,558	0.16
1985 (Estimate)	31.2	67,920	0.22

1/ Excludes Foreign Third Party Contributions.

SOURCE: FAS/CMP/EPD/PDB 2/5/86
(1510P pg 47)

IV.

Agricultural Exports and Market Development Expenditures of the United States and Its Principal Competing Countries 1/

1982-84

COUNTRY	REVISED 1982			REVISED 1983			ESTIMATED 1984		
	EXPORTS	MARKET DEVELOPMENT	PERCENT OF EXPORTS	EXPORTS	MARKET DEVELOPMENT	PERCENT OF EXPORTS	EXPORTS	MARKET DEVELOPMENT	PERCENT OF EXPORTS
	(Billion)	(Million)	Pct.	(Billion)	(Million)	Pct.	(Billion)	(Million)	Pct.
Australia 2/	US$ 8.2 A$ 7.4	76.0 68.8	.93	8.4 8.5	74.5 75.2	.88	9.2 10.1	68.4 75.3	.75
Canada 3/	US$ 7.6 C$ 9.3	12.2 14.5	.16	7.7 9.5	13.6 16.9	.18	7.6 9.8	15.6 19.3	.20
Denmark 4/	US$ 4.0 DKr 33.4	20.4 169.4	.51	3.7 34.5	20.2 186.7	.54	3.8 38.6	19.6 201.5	.52
France 4/	US$ 15.5 FF 101.4	28.4 188.2	.19	15.6 120.0	27.9 214.5	.18	15.9 137.6	25.7 222.5	.16
Israel 4/ 5/	US$ .9	13.1	1.46	.8	10.6	1.33	N.A	N.A	
Netherlands 4/	US$ 13.9 DFl 37.0	44.2 117.8	.32	15.0 43.3	35.4 102.2	.24	14.8 48.3	33.6 110.1	.23
New Zealand 6/	US$ 4.1 NZ$ 4.7	40.6 52.8	.99	3.5 5.2	43.0 64.8 7/	1.23	3.5 5.7	48.3 95.4	1.38
South Africa 4/	US$ 2.0 R 2.1	15.2 16.2	.77	1.5 1.7	13.2 14.6	.86	1.2 1.8	12.6 18.9	1.05
TOTAL	$56.1	$250.5	.45	$56.3	$238.5	.42	$56.0	$223.8	.39
UNITED STATES 8/	$39.1	$51.9	.13	$34.8	$56.8	.16	$38.0	$65.2	.17

1/ Exchange rate source: Treasury Reporting Rates of Exchange, Department of the Treasury Fiscal Service, Bureau of Government Financial Operations.

2/ July-June fiscal year data.

3/ Export data based on calendar year, market development expenditures on April - March fiscal year.

4/ Calendar year data.

5/ Israeli data is reported in U.S. dollars, the unit of account prevalent in Israel for reporting market development expenditures and exports. To convert these figures to Israeli Shekels for comparison's sake would not be meaningful due to the Shekel's steady devaluation in relation to the U.S. dollar. Data for CY 1984 was not available at the time of this report.

6/ Export data based on calendar year for 1982 and 1983, and on July-June Fiscal Year for 1984. Market development expenditures are aggregated over various fiscal years.

7/ Does not include trade show budget for 1983 -- figures are not currently available.

8/ October-September fiscal year data. Source for export data is Foreign Agricultural Trade of the United States (FATUS). Market development data includes FAS funds and U.S. cooperator contributions.

FAS/CMP/EPD/JUNE 1985

WEDNESDAY, APRIL 16, 1986.

AGRICULTURE BUDGET FOR 1987

WITNESS

HON. GEORGE E. BROWN, JR., A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA

Mr. WHITTEN. Our colleague, George E. Brown is here.

Our Committees have a joint partnership in view of many things that we have in common. We are always glad to hear from you.

Mr. BROWN. Thank you, Mr. Chairman.

I am not always happy to be here because I do not envy you the job you have of trying to keep our national agricultural programs in a healthy state under the circumstances it faces. I am not going to deal with the broad problems but with a few concerns which I have personally. And I appreciate the fact that you are willing to bear with me on that.

As you know, I have been a strong advocate of the research, extension and teaching programs at USDA. And I am generally pleased with the Administration proposals for the Agricultural Research Service, especially the long overdue attention being paid to our germplasm needs. The National Plant Germplasm system, and the supporting germplasn research efforts are the foundation of our hopes in the field of biotechnology. We cannot create new gene sequences out of thin air, but are dependent upon existing germplasm stocks and future exploratory and description efforts. I hope that this increased emphasis on the germplasm programs will continue.

I want to comment on some problems of western agriculture which cause me some concern, the issue of salinity and the concentration of toxic substances which are increasing due to irrigated agriculture. Soil and water salinity have been a problem for many, many years in irrigated western agriculture. The recent problems with selenium concentration at Kesterson Wildlife Refuge in California are merely another manifestation of the movement and concentration of various salts due to irrigation practices. We are also finding a large number of toxic chemicals, many of them agricultural chemicals, causing problems in our groundwater and in our surface water.

This has been of particular concern to me because the Department of Agriculture has a salinity laboratory in my own community of Riverside, which has been exploring these problems for some years. The facility has an international reputation but is in urgent need of modernization to keep up with the task it faces. I am told that there is an ARS study due soon and a study from the University of California at Riverside which point to the need for construction of a new lab which would be located on or near the campus. This lab would be operated in concert with the University Soil Science Department and a newly created Center for Environmental Toxicology at the university. We will also be able to call on the ARS Field Station at Brawley, which is researching irrigation and salinity problems.

I realize that these are tight times for the budget and for ARS. However, given the magnitude of this problem of western irrigation, I hope that this Committee will see the need to move quickly on solving some of these salinity and toxic problems. It would be my hope that we could secure some planning money for this facility in the near future, possibly in this bill. And I would be more than happy to work with the Subcommittee on this matter.

I am pleased that we were at least able to return to the previous level of funding for the Hatch Act funds. I am disturbed by the other cuts being proposed in the Cooperative State Research Service, especially the wholesale elimination of the special grants program. The cuts in pest management and pesticide clearance are especially disturbing, given the urgent needs in this area.

In the proposed rewrite of the FIFRA Act now going on in the House Agriculture Committee, we find that the issue of minor use of agricultural pesticides and the reduction of pesticide costs are on the agenda of many farm groups. I hope that the funds for these programs, which are essential, can be restored.

I am also supporting the funding for the Critical Agricultural Materials Program. I hope that that can be restored. The Chairman knows of my long-standing interest in the program, and I will not elaborate on this, on the need for it.

I think that I share with the Chairman a certain disturbance about the Extension Service cuts. These cuts and the accompanying language propose a major shift in the mission of the Extension Service, and a shift which I hope the Subcommittee will reject. I know that the Chairman has some problems with these cuts and I would like to associate myself with his support that he has expressed so often for the Cooperative Extension.

I also would like to add a word about adequate funding for the Department of Agriculture's Animal Welfare Program. I know that this sometimes is considered to be controversial. The program is enforced by APHIS, Animal and Plant Health Inspection Service. And the President has, for the second year in a row, proposed eliminating funding for the enforcement of this Animal Welfare Act.

I would hope that the Subcommittee would look favorably upon maintaining this program at its current level, together with adding an amount which we have authorized in the Farm Bill last year for the establishment of a data base on alternatives to the use of live animals in research, which I think would be extremely helpful to the national research community and would help us to save money on animal research in general by eliminating duplicative research. The amount of money for this is relatively small, three-quarters of a million dollars, but it could have major effects on the scientific community.

I think the Chairman has received a communication indicating the extraordinary support that this proposal has from both the research community and the animal welfare community. For the first time, at least in my knowledge, they have been able to get together in a united support for this kind of an activity which we think would be economically beneficial as well as contribute a great deal to the reduction in the use of animals in research. And we know that, of course, the use of these animals is extremely important.

Mr. Chairman, just one concluding comment of a parochial nature. I have had a number of people from the Southwest come to me recently about the Boll Weevil Eradication Program. The President again did not include funding for this program, and that concerns me and those who are involved in cotton in the Southwestern United States. We think the Boll Weevil Eradication Program has been extremely effective, but that the gains that have been made will be lost if we cannot carry the program to completion.

We recognize that California and Arizona have not had the difficulties that your State has had with the boll weevil, but we certainly do not want to terminate the very program which will help Western States to avoid this crisis.

And I want to thank the Chairman very much for his kindness in listening to me.

Mr. WHITTEN. Thank you very much.

We appreciate your support not only now, but in past years. We have a kindred interest in the same things.

You heard statements I made earlier about the situation with the budget for 1987.

Mr. BROWN. Yes, sir.

Mr. WHITTEN. I do not know what we can do.

I personally feel that we should restore funds to keep things as they are because American agriculture is facing a serious crisis. The Office of Budget and Management seems to figure we can do without agriculture.

For the last few years, I have been reading about abolishment and all those kinds of things. The farmers, I believe, are as willing to cooperate in reducing budgets as any group in the country. But the proposed cuts are not going to reduce the deficit. In the same budget, OMB recommends great increases for the military, raising the carryover funds from $244 billion to $299 billion.

The last supplemental that we had before we went home last summer had a few hundred million dollars to meet urgent needs in the United States. We received lots of criticism about including those funds. But at the last minute the Administration added $2,250,000,000, an increase for foreign aid, largely for two countries for six weeks. We had no complaint whatever about that. And somehow we have to get those at the highest level to realize that we had better look after our own country, because all this other is dependent on it.

We are spending $140 billion a year buying things we could provide for ourselves. I use the illustration that, if you are in business and you can buy Japanese steel cheaper, you might make money, but the country's money would be gone. If you bought it here in the U.S., you would have the steel and the money.

So, for these things that we can do for ourselves, I think we are going to have to get back to that. Our textile industry is in bad shape Our shoe factories are in bad shape. Just about everything, including agriculture, is suffering. We are holding our agricultural production off world markets, and giving our markets to our competitors.

So you see the crisis we have. And we are counting very strongly on you to help us correct it.

Mr. **Brown**. Mr. Chairman, I have a very great respect for your sense of priorities, and you know I am going to continue to help you in every way I can.

Mr. **Whitten**. We have worked together many times.

Thank you very much.

Mr. **Brown**. Thank you.

[The statement of Congressman Brown follows:]

April 16, 1986
TESTIMONY BEFORE THE APPROPRIATIONS SUBCOMMITTEE
on
AGRICULTURE, RURAL DEVELOPMENT AND RELATED AGENCIES
CONG. GEORGE E. BROWN, JR.

Mr. Chairman, members of the subcommittee, I appreciate the opportunity to come before you today to discuss the Department of Agriculture (USDA) appropriations for Fiscal Year 1987.

As you know, I have been a strong advocate of the research, extension and teaching programs at USDA. I am pleased with the Administration proposals for the Agricultural Research Service, especially the long overdue attention being paid to our germplasm needs. The National Plant Germplasm system, and the supporting germplasm research efforts, are the foundation of our hopes in the field of biotechnology. We cannot create gene sequences out of thin air, but are dependant upon existing germplasm stocks and future exploratory and description efforts. I hope that this increased emphasis on plant germplasm programs will continue.

I would like to note a problem in western agriculture which causes me some concern, the issue of salinity and the concentrations of other toxic substances which are increasing due to irrigated agriculture. Soil and water salinity have been a problem for some time in irrigated, western agricuture. The recent problems with selenium concentrations at Kesterson Wildlife Refuge in California are another manifestation of the movement and concentration of various salts due to irrigation practices. We are also finding a number of toxic chemicals, mostly agricultural chemicals, causing problems in groundwater and surface water.

The USDA has a salinity laboratory in Riverside, California which has been exploring these problems for some years. The facility has an international reputation, but is in urgent need of modernization to keep up with the task it faces. I am told that there is an Agricultural Research Service (ARS) study due soon, and a study from the University of California at Riverside, which point to the need for construction of a new lab, located on or near the UCR campus. This lab would be operated in concert with the UCR soil science department and a newly-created Center for Environmental Toxicology at the University. We will also be able to call upon the ARS field station at Brawley which is researching irrigation and salinity problems.

I realize that these are tight times for the budget and for ARS. However, given the magnitude of the problem, I hope that this committee will see the need to move quickly on solving salinity and toxics problems facing western agriculture. It would be my hope that we could secure planning money for this facility in the near future, perhaps in this bill. I would be glad to work with the subcommittee in this matter.

Returning to the rest of USDA's FY'87 funding, I am pleased that we were at least able to return to the previous level of funding for the formula funds distributed under the Hatch Act. I am disturbed by the other cuts being proposed in the Cooperative State Research Service (CSRS) function, however, especially the wholesale elimination of the special grants program. The cuts in pest management and pesticide clearance are especially disturbing, given the urgent needs in this area. In the proposed rewrite of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) being undertaken in the House Agriculture Committee, the issue of minor uses and the reduction of pesticide costs are on the agenda of many farm groups. I hope that these funds, which are essential to these tasks, can be restored.

I am also hoping that the funding for the Critical Agricultural Materials program can be restored. The Chairman knows of my long-standing interest in this program, and I do not need to elaborate on the need for this program designed to provide farmers with cropping and marketing alternatives.

I am very upset with the cuts proposed in the Cooperative Extension Service. The funding cuts, and accompanying language, propose a shift in the mission of the extension service, a shift which should be rejected. I know of the Chairman's problems with these cuts, and I would like to associate myself with his support for Cooperative Extension.

I would also like to add my support for adequate funding for the United States Department of Agriculture's (USDA) Animal Welfare Program. The Animal Welfare Act is enforced by the Animal and Plant Health Inspection Service (APHIS) which is responsible for overseeing the treatment of animals by animal breeders, exibitors, and transporters, as well as research facilities which use animals in research. The President, for the second year in a row, has proposed eliminating funding for enforcement of this Act.

For Fiscal Year 1985, Congress appropriated $4.8 million for the Animal Welfare Program. However, additional funds were necessary to conduct needed inspections and enforcement responsibilities, and USDA funds were reprogrammed into the Animal Welfare Program for a total expenditure of $5.899 million. With this funding, APHIS was able to inspect all research facilities and conduct follow-up visits, as well as carry out its other responsibilties with regard to animal breeders, exhibitors and transporters.

The 1985 Farm Bill, signed into law December 23, 1985, included the Improved Standards for Laboratory Animals Act of 1985. This legislation amended the Animal Welfare Act and mandated the creation of a data base in the National Agriculture Library. This data base will contain information on available alternatives to the use of live animals in research and information which will help reduce unintended duplication of experiments. This is a worthwhile initiative. APHIS has roughly estimated the start up cost for this data base to be $750,000.

Major animal welfare groups and major research associations have taken an extraordinary step in banding together to request $6,648,850 for the FY'87 Animal Welfare Program budget. This request is based upon the $5,898,850 spent for the program last year, and an additional $750,000 for the data base.

There has been a growing interest in our society regarding the treatment of animals. The National Institutes of Health (NIH) has issued new animal care guidelines for NIH-funded faciltities using animals, and Congress passed the 1985 Farm Bill which included strengthening amendments to the Animal Welfare Act.

It is very clear that both our policy making bodies and the public are taking our animal care laws much more seriously. I would deeply appreciate your consideration of $6,648,850 in funding for the APHIS Animal Welfare Program.

Another program which I feel is extremely worthwhile is the Southwest Boll Weevil Eradication Program. The President did not include funding for this program in the budget this year, and that concerns me. The program has been very effective in eradicating this pest in isolated areas, but the gain will be lost if the program cannot be carried to completion. While California and Arizona have not had the difficulties that the Chairman's state has had with the boll weevil, we certainly do not want to terminate the very program which will help western states avoid such a crisis.

Again, I would like to thank the Chairman and members of the subcommittee for this opportunity to discuss my concerns.

WEDNESDAY, APRIL 16, 1986.

WATERSHED PROTECTION PROGRAMS

WITNESS

HON. ROBERTA HUGHAN, MAYOR, CITY OF GILROY, SANTA CLARA COUNTY, CALIFORNIA

Mr. WHITTEN. Mayor Hughan, it is good to see you.

Mayor HUGHAN. Thank you very much for allowing me to come and speak to you in favor of the Soil Conservation Service Small Watershed Program.

The Gilroy City Council wants to request of you that that program be continued and that it be adequately funded.

In our community, we have the Llagas Creek project, and that is an ongoing project for about 15 years. It is being built in phases with half the money from the State of California and half the money from the Soil Conservation Service.

This last year, we had a severe flood in our community, and all the people came and got sandbags, but those people in the southeast part of the town did not get flooded because the channel had been improved up to their area. So already the project has provided benefit to us.

We would like, of course, to see that project continue through 1991 so that the agricultural areas around the community and our adjacent city, Morgan Hill, will also be protected.

Even though we are famous for Silicon Valley, the City of Gilroy considers this the garlic capital of the world, and we grow and process a lot of garlic there. And we do not like to see that flooded either.

So I would like your support in seeing that the soil conservation program, watershed programs, are continued.

Mr. WHITTEN. May I touch on a subject that we are very strong for.

Years ago, I went to a convention of the Democratic Party and got them to put in their program 63 pilot projects to show the need for watershed protection and flood prevention.

Following that, Carl Anderson from Minnesota became Chairman of this Subcommittee, and he and I worked together to establish this program during his two-year term as Chairman of this Subcommittee. We are very proud of it. We got money in the bill to reduce the many floods we have in this country, and you have had them in California.

But we still cannot get the Office of Budget and Management to realize the best way to prevent floods is to hold the water back in the watersheds.

Mayor HUGHAN. Yes.

Mr. WHITTEN. And if you let it get out onto the flatland below, you cannot control it.

Now, we have a hard fight to stay even with flood threats. As trees die, as forest fires burn down trees, as we put the land under concrete, these all speed up the flow of water and increase flood damage. So we have got a hard job just trying to stay even. But I think the watershed program is one of the most effective means we have ever had of holding water back and reducing floods.

But they eliminate the funds at the OBM level nearly every year. It did not start with this Administration, but it is something we have to contend with nearly every year.

I succeeded finally in getting a pilot program where the Corps of Engineers, which has the authority to condemn land, and the Soil Conservation Service which does not, have joint pilot projects. They show the value of working together on these things. So the Congress has backed this committee in restoring funds for this purpose. I hope we can restore this again, because it is absolutely essential if we are going to protect our country.

In your State you have got just about every variety of soil. But in much of it, you are absolutely dependent on trying to keep the water back in the hills, and trying to keep all this mud from sliding down and destroying homes and other things. So we are in accord with you.

Mayor HUGHAN. Thank you very much,

Mr. WHITTEN. Thank you.

[The statement of Mayor Hughan follows:]

STATEMENT

OF

ROBERTA HUGHAN, MAYOR

CITY OF GILROY
SANTA CLARA COUNTY, CALIFORNIA

April 16, 1986

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Before the

UNITED STATES HOUSE OF REPRESENTATIVES

COMMITTEE ON APPROPRIATIONS
SUBCOMMITTEE ON AGRICULTURE, RURAL DEVELOPMENT,
AND RELATED AGENCIES

Honorable Jamie L. Whitten, Chairman

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SUMMARY

We urge your favorable consideration of continued funding for the Soil Conservation Service's conservation and resource protection programs nationwide.

STATEMENT OF ROBERTA HUGHAN, MAYOR
CITY OF GILROY
SANTA CLARA COUNTY, CALIFORNIA

Llagas Creek Flood Control Project (PL 566)

Soil Conservation Service

Thank you for permitting me to speak in support of the appropriations for the watershed protection programs of the Soil Conservation Service.

The Gilroy City Council wishes to convey its urgent desire that Congress not only continue providing the services of the Soil Conservation Service's PL 566 Small Watershed Program but that it be adequately funded. The Llagas Creek Flood Control project construction in our community has progressed in phases in recent years. Any diminution or cessation of funding for the PL 566 Program would leave our community with a partially completed project, the completion of which would be far beyond our local resource capability.

The Llagas Creek project will - when completed - provide significant flood protection to our city, to the adjoining community of Morgan Hill, and to extensive agricultural areas adjacent thereto.

We urge your favorable consideration of continued funding for the Soil Conservation Service's conservation and resource protection programs nationwide.

WEDNESDAY, APRIL 16, 1986.

ANIMAL WELFARE AND HORSE PROTECTION

WITNESS

YVONNE B. EIDER, EXECUTIVE DIRECTOR, COMMITTEE FOR HUMANE LEGISLATION, WASHINGTON, D.C.

Mr. WHITTEN. We will hear now from Yvonne Eider.

Ms. EIDER. Thank you, Mr. Chairman.

I am here today to express a number of concerns the Committee for Humane Legislation has in connection with the appropriations for the Department of Agriculture being discussed.

Our first concern is with the general attitude of many of the Department officials toward animals. I think these concerns are best summed up by something said by an APHIS official when the Predator Control Program was recently shifted from Interior to Agriculture. He said, and I quote, "The cattlemen, the wool growers felt that program was more appropriately aligned with Agriculture because of the philosophy and the charge of Agriculture to protect agriculture."

He further said, "They felt there was a conflict with Interior and its protection for animals."

The administration of the Animal Welfare Act is a good case for discussion. The Department has never made a secret of the fact that they have no interest in administering the Act. This was once again clearly pointed out by Administrator Hawkins when he appeared before this Committee a few weeks ago and devoted two sentences in his presentation to the Act, and these sentences were, "We propose to eliminate funding for the Animal Welfare Act and horse protection programs. These activities do not compete well with the priorities of agricultural health protection given the reality of budget reduction." That there is no commitment to carrying out this program is not new, however, with the current budgetary climate. This has been the case since it was enacted in 1966, and this is pointed out in the GAO report released in May of 1985.

I would urge the Committee to review this document which reveals very significant lack of enforcement. No amount of money appropriated by this Committee is going to make a difference without commitment by the Department. In fact, in a letter to Chairman Thad Cochran from the then Deputy Secretary Lyng in July of 1984, we read, "Technical factors, unforeseen changes in pest and disease situations, and the changing State and industry interest levels occasionally preclude full use of program funds.

"For these reasons, it is likely that the animal welfare and imported fire ant programs will accumulate some surplus funds this year."

GAO found the previous year APHIS allocated $697,000 of the animal welfare funding for purchasing vehicles during the year to reduce the surplus. At this same time in New York and California, two of the six States reviewed by GAO, GAO found that half of the licensed facilities were not inspected even one time that year. This is especially interesting when you read APHIS' Enforcement Report to Congress for that year where they report that, during the fiscal year, the average compliance inspection per licensee or registrant was 2.3 times. We believe this makes it perfectly clear that even if, in our opinion, this was a good Act, money without commitment will make no difference.

The most recent action by the Department in connection with their face branding requirement under the dairy buyout program, once again points to total lack of sensitivity by Department officials to the well-being of animals. Deputy Under Secretary Richard Golberg told another House Committee last week that "APHIS, in cooperation with the States, has for years identified animals for disease eradication programs by branding on the job, and has reported no unusual problems or eating difficulties for the animals." We are not satisfied with this response. Just because this has been the practice does not make it right nor less painful for the animal. This view is shared by dairy farmers who become very attached to the animals and do not wish to see them suffer in this way.

We have some problems also with the Water Bank Program With the focus being on building of duck and goose populations for sport hunting. If we are talking priorities here today, we are hoping that a very close look will be taken at these expenditures for recreational activity of benefit to a very small number of taxpayers. Even if we had unlimited Federal dollars to spend, a recent survey conducted by the respected firm of Doyle, Dane and Bernbach shows that two-thirds to three-fourths of the American people are opposed to sport hunting.

Also these programs using millions in tax dollars benefit only a small number of animals which are considered game.

In closing, speaking for an organization opposed to sport hunting, I would urge the members of this Committee to review carefully and cut items before you this fiscal year which are subsidies to the hunting world.

Thank you for this opportunity.

Mr. **Whitten**. Thank you. We can appreciate your interest. You realize some of the problems that we have with the budget this year.

Also, in different sections of the country, we have had a problem this year with regard to animals. We have got so many different areas, we have got the farming sections where they may be a pest, and we have got others where they may be an asset.

And I would let one agency handle the whole thing, whichever agency it is. The change was well made. Agriculture was directed to cooperate with Interior, so that each would contribute what they were best able to do.

We have very large financial problems this year. As I have pointed out, OMB has recommended that we cut about $9 billion out of the Department of Agriculture. Then they come along with Gramm-Rudman and cut it some more. It leaves us a real problem.

But we appreciate your appearance and we will do the best we can.

Ms. **Eider**. Thank you, Mr Chairman.

[The statement of Ms. Eider follows:]

COMMITTEE FOR HUMANE LEGISLATION
FRIENDS OF ANIMALS, INC.
Suite 800, 400 First Street, Northwest
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Yvonne B. Eider
Executive Director
Committee for Humane Legislation
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Statement of

Yvonne B. Eider, Executive Director

Committee for Humane Legislation

before the

Subcommittee on Agriculture, Rural Development and Related Agencies

Committee on Appropriations

April 16, 1986

Administrative Offices
1 Pine Street
Neptune, NJ 07753

I am here today to express a number of concerns the Committee for Humane Legislation has with the appropriations for the Department of Agriculture being discussed.

Our first concern is with the general attitude of many of the Department officials toward animals. I think these concerns are best summed up by something said by an APHIS official when the Predator Control Program was recently shifted from Interior to Agriculture. He said, and I quote, "The cattlemen, the wool growers felt the program was more appropriately alligned with Agriculture because of the philosophy and the charge of USDA to protect agriculture." He further said, "They felt there was a conflict with Interior and its protection for animals."

The administration of the Animal Welfare Act is a good case for discussion. The Department has never made a secret of the fact that they have no interest in administering the Act. This was once again clearly pointed out by Administrator Hawkins when he appeared before this Committee a few weeks ago and devoted two sentences in his presentation to the Act and these two sentences were "We propose to eliminate funding for the animal welfare act and horse protection programs. These activities do not compete well with the priorities of agricultural health protection given the reality of budget reduction." That there is no commitment to carrying out this program is not new, however, with the current budgetary climate. This has been the case since it was enacted in 1966 and this is pointed out in the GAO report released in May of 1985. I would urge the Committee to review this document which reveals very significant lack of enforcement. No amount of money appropriated by this Committee is going to make a difference without commitment by the Department. In fact, in a letter to Chairman Thad Cochran from the then Deputy Secretary Lyng in July of 1984, we read, "Technical factors, unforeseen changes in pest and disease situations, and changing State and industry interest levels occassionally preclude full use of program funds. For these reasons, it is likely that the animal welfare and imported fire ant programs will accumulate some surplus funds this year." GAO found that the previous year APHIS allocated $697,000 of the animal welfare funding for purchasing vehicles during the year to reduce the surplus. At this same time in New York and California, two of the six states reviewed by GAO, GAO found that half of the licensed facilities were not inspected even one time that year. This is especially interesting when you read APHIS' Enforcement Report to Congress for that year where they report that during the fiscal year the average compliance inspection per licensee or registrant was 2.3 times. We believe this makes it perfectly clear that even if in our opinion this was a good Act, money without commitment will make no difference.

The most recent action by the Department of Agriculture in connection with their face branding requirement under the dairy buyout program once again points to a total lack of sensitivity by Department officials to the well-being of animals. Deputy Under Secretary Richard Golberg told another House Committee last week that "APHIS, in cooperation with the States, has for years identified animals for disease eradication programs by branding on the jaw, and has reported no unusual problems or eating difficulties for the animals." We are not satisfied with this response. Just because this has been the practice doesn't make it right nor less painful for the animal. This view is shared by dairy farmers who become very attached to their animals and do not wish to see them suffer in this way.

Another program under your purview with which we have some problem is the Water Bank Program. As you all know, the main focus of this program is on building duck and goose populations for sporthunting. If we are talking priorities here today, we hope that a very close look will be taken at these expenditures of benefit to a very small number of taxpayers. Even if we had unlimited Federal dollars to spend, a recent survey conducted by the respected firm of Doyle, Dane and Bernbach shows that two-thirds to three-fourths of the American people are opposed to sporthunting. I believe the amount being requested for Water Bank for this Fiscal Year is $8,800,000. As you know, too, this is one of many programs being funded by tax dollars to benefit only the very small number of animals considered "game."

In closing, speaking for an organization opposed to sporthunting, I would urge the members of this committee to review carefully and cut the items before you this Fiscal Year which are subsidies to hunting activities.

Thank you for this opportunity to appear.

WEDNESDAY, APRIL 16, 1986.

ANIMAL WELFARE AND HORSE PROTECTION

WITNESS

CHRISTINE STEVENS, SECRETARY, SOCIETY FOR ANIMAL PROTECTIVE LEGISLATION, WASHINGTON, D.C.

Mr. WHITTEN. Ms. Christine Stevens is next. Ms. Stevens, how are you doing? We are glad to see you.

Ms. STEVENS. Thank you, Mr. Chairman. Glad to be here again.

Mr. WHITTEN. We will be glad to hear from you. Your whole statement will appear in the record of the hearings and you can touch on the highlights.

Ms. STEVENS. That is what I will do.

Mr. WHITTEN. When an earlier witness was here, we gave her the name of a man at OMB and suggested she might have her organizations write him. He is the one who fails to recommend any money for these programs, leaving us with the job of finding where we can get it.

So I gave her the name and suggested she write him.

Ms. STEVENS. Well, we will be very glad to take that suggestion but—

Mr. WHITTEN. If we have to restore a cut recommended by the budget, it is more difficult to get it.

Ms. STEVENS. Obviously.

However, I think it is very significant that the humane organizations and the scientific organizations have both agreed on this very specific figure, which I do not know, because I did not hear the figure.

Mr. WHITTEN. Well, I did not try to write a letter. I just told her that is where the problem originates so that is the place to write in addition to whatever else you do.

Ms. STEVENS. Oh, yes, I certainly agree. And we will definitely direct mail to the Budget Director.

I think that what is important to note is what USDA spent.

Mr. Chairman, did you have an opportunity to look at this sheet which gives the exact expenditures by USDA for 1985, and that amounted to $5,898,850. So that is what they spent to do the work.

And we were able to inspect laboratories 2.7 times. That is an average, that is, per year, using——

Mr. WHITTEN. I realize the extra money you are asking, but the regular money is not in the budget——

Ms. STEVENS. I looked.

Mr. WHITTEN. That is the reason I was saying that. Of course, they can always send up a supplemental request if they would. I do not know that they will, but that would make it easier to try to handle it.

Ms. STEVENS. Well, we will do everything we can along those lines. But it certainly has been difficult because OMB has consistently asked for less money and, thank goodness, Mr. Chairman, you have always recommended being at the same level.

However, as you know, when the amendments were passed to improve standards for arbitrary animals, it included a requirement for information service in the National Agricultural Library in cooperation with the National Library of Medicine. And that is something that I believe is not only greatly advantageous to animals, to scientists, but also to saving money for the government. Because when animals can be substituted for, so far it has been always that it is cheaper and quicker when you can do a test that is, for example, on salmonella. That is one of the things the Ames Test uses. You get the answer. You might have spent even hundreds of thousands of dollars on a series of animal tests. Here you do it with maybe a couple of thousand dollars. So it is really important to study this very modest amount, $750,000, as what the Library has estimated it will cost to get the program going in fiscal year 1987.

So I think that OMB has not even taken cognizance of the fact that the law has been strengthened by unanimous consent of both the Senate and the House. So that is a very vital part that I think should be important to you, Mr. Chairman, because of your dedicated interest in saving money and having the government run properly.

So, again I would like to emphasize what we have come up here with is what was spent in '85 cost $750,000. So that is $6,698,850.

I have some statistics here on how often the inspectors did visit the different sites. And the last witness was speaking of some very definite failures on APHIS' part in New York and California—I think it is at least two years ago—which was what the GAO was talking about. But since that time, they definitely have not left out any institutions, they have not omitted funding.

And you will see on page 2 exactly what the words are describing the work of the National Agricultural Library Information Service. And attached is a xerox of a couple of pages from NIH symposium telling about the enormous work that has gone on because of failure of two government agencies are more, not to compare with each other, and they just go ahead with extremely expensive tests. And as you can see, the estimate was in the billions of dollars.

So here is a chance to help animals with feed money and do better science.

Now, I would like briefly just to touch on, and I am sure you must have seen this letter because it is directed to you, and it is a remarkable document, one that I would hardly believe you would have so many scientific and so many groups signing onto one single thing. But that really means that everybody who is really concerned with this program for a variety of reasons, all agree that this modest increase is genuinely needed and we are hoping that you will be able to make that possible.

Mr. Whitten. Well, we can appreciate that.

Someone the other day, said they wanted our help. I said, well, you have got that, but what you want really is money. Our problem is money, But it is awfully hard under present conditions to find money, which has to come above the budget targets.

You are familiar with the Gramm-Rudman provision, you are familiar with the cut of about $9 billion for 1987. So I frankly do not know what we can do under present conditions.

First we must get through with hearings. Then we must see from the money available what we can recommend. Then we have to get Congress to agree.

But we do appreciate your problem.

Ms. STEVENS. Well, at least, it is an improvement program, and you have had a lot to do with that becoming the size it has so we just——

Mr. WHITTEN. Well, we try. But each year we have a whole lot more requests than we can meet. And this year it is worse than I have ever seen it.

Ms. STEVENS. I do not doubt that.

But we will get in touch with budget.

Mr. WHITTEN. Yes. Do that.

The more appreciation OMB has the better. I am sure they pay some attention to what is needed. But sometimes I do not think they pay attention to the right things. But that has to be understood, I guess.

Thank you very much.

Ms. STEVENS. Thank you, Mr Chairman.

[The information follows:]

SOCIETY FOR ANIMAL PROTECTIVE LEGISLATION
P. O. Box 3719
Georgetown Station
Washington, D.C. 20007

(202) 337-2334

STATEMENT IN SUPPORT OF $6,698,850
FOR ENFORCEMENT OF THE ANIMAL WELFARE ACT FY 87

Before the Subcommittee on Agriculture, Rural Development, and Related Agencies

by Christine Stevens, Secretary

April 16, 1986

On behalf of the Society for Animal Protective Legislation, I respectfully request that an appropriation of $6,698,850 be made for FY 1987 for enforcement of the Animal Welfare Act. This figure comprises the cost of enforcing the Act in 1985 plus $750,000 to provide an information service at the National Agricultural Library, as provided in the Improved Standards for Laboratory Animals amendments unanimously adopted by the House of Representatives and Senate as a part of the Farm Bill.

Attached is a breakdown provided by The Animal and Plant Health Inspection Services of funds expended in FY 1985 to carry out the provisions of the Act. (1) Investigation of complaints and alleged violations, registering and inspection of research facilities, licensing and inspection of animal dealers, exhibitors, carriers and intermediate handlers, administration, including regional animal care specialists and staff and regulatory compliance staff, make up the total, together with $266,284 for training.

The 1,219 registered research facilities with 2,399 sites were visited an average of 2.7 times in 1985; premises of the 3414 licensed dealers were visited an average of 2.4 times. The 1386 exhibitors were inspected an average of 2.3 times, the 248 intermediate handlers were inspected an average of 1.7 times in 1985. In addition, 4027 inspections were made at airports. It is clear that APHIS' Veterinary Services is doing a massive and highly demanding job on a tight budget. To carry out the expressed will of Congress for assuming greater responsibility in accordance with the amendments to the Animal Welfare Act due to take effect December 23rd of this year, a sum at least equal to this needs to be appropriated.

The additional $750,000 for the mandated information service at the National Agricultural Library will bring about savings in government expenditures far greater than its cost. To quote the new amendments:

> (e) The Secretary shall establish an information service at the National Agricultural Library. Such service shall, in cooperation with the National Library of Medicine, provide information--
>
> (1) pertinent to employee training;
>
> (2) which could prevent unintended duplication of animal experimentation as determined by the needs of the research facility; and
>
> (3) on improved methods of animal experimentation, including methods which could--
>
> (A) reduce or replace animal use; and
>
> (B) minimize pain and distress to animals, such as anesthetic and analgesic procedures.

Duplication of testing by different government agencies has been estimated to be costing the taxpayer billions of dollars. (2) Reduction in this economic waste and abuse of animals is essential.

The information service is designed to prevent animal suffering and save government money by making alternatives to laboratory animals more readily available (alternatives are generally less expensive than animal experiments, and in most cases test results using alternatives are more rapidly achieved) and by preventing unintended duplication of animal experiments.

Providing information for employee training will enable institutions to conduct such training efficiently, thereby advancing the dual goals of preventing animal suffering and preventing waste of tax funds, which has occurred when neglected animals sicken and die. The modest investment in the information service is capable of saving government funds vastly greater than the cost of the service. This provision of the Improved Standards for Laboratory Animals amendments combines humane treatment of animals with cost effectiveness of a very high order.

The scientific community and animal protective organizations strongly urge this distinguished Subcommittee to recommend $6,698,850 for Fiscal Year 1987. In a letter dated April 2, 1986, 98 groups joined in calling for this appropriation. A copy of the letter, addressed to Chairman Whitten, is attached for your convenience in referring to the wide span represented. (3) Nor does this list of signatories represent every organization which supports this appropriation. Additional groups did not make the deadline for submission of the letter.

This remarkable outpouring of support for adequate funding to ensure that the Animal Welfare Act is enforced demonstrates the great significance of this law to those most directly affected by or concerned with it and to the American public at large. We respectfully request that this appropriation be made.

Horse Protection Act

The Horse Protection Act has slowly reduced the cruel and painful soring of Tennessee Walking Horses in accordance with laws passed by Congress for that purpose in 1970 and 1976. We request that $331,084 be appropriated to enforce the law. This is the amount spent by USDA in FY 1985.

References

(1) Cost of Animal Welfare Accomplishments FY 1985 (U.S. Department of Agriculture)

(2) Trends in Bioassay Methodology (pp 132 - 133) National Institutes of Health, 1981

(3) Letter from 98 scientific and animal protective groups to Chairman Whitten

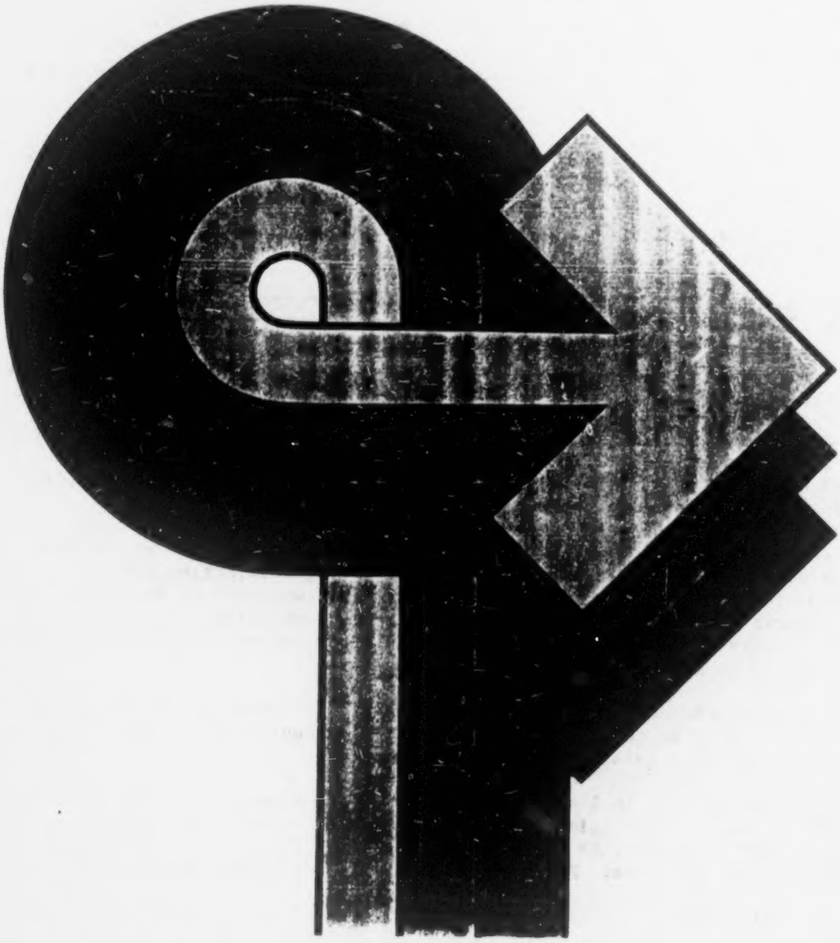
Cost of Animal Welfare Accomplishments
FY 1985

Field Work Unit	Dollars Spent
Licensing Dealers' Premises	$ 203,007
Inspection of Licensed Dealers	935,949
Reinspecton of Licensed Dealers	187,189
Registering Research Facilities	29,880
Inspect Research Facility Sites	657,802
Reinspect Research Facility Sites	101,064
Licensing Exhibitors Premises	28,561
Inspection of Exhibitors	423,593
Reinspection of Exhibitors	71,184
Auction Markets/Sales Monitored	23,288
Register Carrier/Intermediate Handlers	1,757
Inspection of Carrier Sites	181,478
Inspection of Intermediate Handlers Sites	34,712
Searches for Illegal AWA Activity	126,551
Investigate Complaints	164,340
Investigate Alleged Violations	548,826
Submission of Alleged Violations	201,689
Prosecution Support (Court Witness Hearings)	6,590
Request for Additional Information (Violations)	58,881
Attempted Inspection (No One Home)	141,490
Training	266,284
Subtotal	$ 4,394,115
Regional Animal Care Specialists	337,339
Regional Offices Charges	281,325
Subtotal	$ 5,012,779
Headquarters Unit	
Animal Care Staff	489,991
Regulatory Compliance Staff Charges	220,068
Deputy Administrator Charges	176,012
TOTAL	$ 5,898,850

TRENDS IN BIOASSAY METHODOLOGY

IN VIVO, IN VITRO AND MATHEMATICAL APPROACHES

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES · Public Health Service · National Institutes of Health



had experiments in this country on prisoners and on people who were mentally retarded. We also had experiments on our neighbors south of the border who could not defend themselves.

When we eliminated those practices, we did not eliminate them because we had alternatives. Indeed, we have to this day no other alternatives to the human experiments which were conducted. They were eliminated because there was widespread revolution against that kind of experimentation. We are going to continue experimenting on animals until there is widespread revolution in this country against this sort of practice.

I think that those of us who feel that the practice should be terminated should concentrate on arousing that revolution, not on suggesting alternatives. The alternatives will be developed by the very able scientists who are engaged in this kind of work.

MS. FREE: My name is Ann Free, Albert Schweitzer Fellowship, and the Society for the Study of Ethics in Animals. In a few minutes, the President will be speaking on economics and we, of course, are interested in ethics and efficacy. But I believe that we've learned a great lesson today, particularly from Dr. Morgenroth, to whom I am going to address my question, if that is permissible.

He has pointed out that the IRLG has been concerned with two steps in the "three R's"--reduction and refinement. I wonder if Dr. Morgenroth could give us an educated guess on what the dollar saving, as well as the savings in animal life and, consequently, suffering will be when his interagency program really gets under way.

The second part of the question is: doesn't he think, therefore, that when it gets under way and it's shown that we can get over the antediluvian practices of the past, that we can then go forward to the third "R"--replacement?

DR. MORGENROTH: That's a difficult set of questions. One of the first things we did as a committee was to try to identify duplicative testing where the same tests would not satisfy multiagency requirements. We don't have any real figures as to total dollars that have been spent prior to having the unified testing procedure that the five regulatory agencies would accept. We could make some guesses about it.

I'm aware of one compound that was regulated by three different groups that had duplicative testing based on different agency requirements. I don't know how frequently this kind of phenomenon occurs.

The cost of an animal study, a bioassay, runs almost half a million dollars. A Draize test using the six-animal model costs about $15,000 to $18,000. Bob Osterberg, do you have any feelings, from all the things we reviewed, over the years? Would the total savings be a billion dollars?

MS. FREE: Someone told me earlier, billions of dollars and millions of animals.

DR. MORGENROTH: I think that's possible.

DR. OSTERBERG: I agree with you, Vic. I don't think we have enough information to provide accurate answers. But, conceive of the fact that, of the five-member regulatory agencies that constitute IRLG, three have regulations that require some type of testing--either for premarket clearance or, like CPSC, for regulation of a chemical already on the market. If one agency's data will satisfy the other two, you've cut testing by two-thirds, and reduced your costs likewise.

DR. MORGENROTH: I think that savings could, in fact, be quite dramatic in the future, especially as the Toxic Substances Control Act, the supra-pesticide reregistration, and food additives cyclic reviews come into play. There's enormous economic impact in those programs.

If a single test, done with a given procedure, would satisfy all of the agencies' requirements, there would be significant savings. It may reach billions of dollars. The only way to estimate it would be to make the supposition that all three agencies have different requirements.

In terms of the third "R," our committee, along with international organizations, is looking at the applicability of *in vitro* tests as initial screens to prioritize compounds. Right now, there is no *in vitro* substitute for currently available animal studies for regulatory purposes.

However, I think that some of the research being performed may lead t substitution in 20 years. It's important that people recognize that it's going to take time. As an interim measure, *in vitro* studies can be used to select agents of highest priority to the regulator for utilizing *in vivo* tests.

April 2, 1986

The Honorable Jamie L. Whitten
Chairman, House Appropriations
Subcommittee on Agriculture, Rural
  Development and Related Agencies
U.S. House of Representatives
2362 Rayburn House Office Building
Washington, DC 20515

Dear Mr. Whitten:

In the past you and the House Appropriations Committee have recognized the importance of continuing funding for the USDA Animal and Plant Health Inspection Service animal welfare program. As you know, animal protection organizations as well as the scientific community strongly support effective enforcement of the Animal Welfare Act. Your efforts to provide necessary resources to the agency charged with this responsibility are, therefore, very much appreciated.

In Fiscal Year 1985, the Department of Agriculture spent $5,898,850 to carry out its duties as prescribed by the Animal Welfare Act -- a comparatively modest sum in view of the significance of the national inspection program. Beyond the Department's current activities, in December 1985, Congress adopted amendments to the Act which require that a laboratory animal welfare information service be established at the National Agriculture Library in cooperation with the National Library of Medicine. It is conservatively estimated that $750,000 will be necessary to start the congressionally-mandated service in FY 87.

The undersigned organizations respectfully request that the Committee once again protect this essential inspection program and recommend appropriations of **$6,648,850 for FY 87** -- the minimum amount required to implement the Animal Welfare Act as recently amended. Your consideration will be most appreciated. Please contact Christine Stevens, Society for Animal Protective Legislation (202-337-2332), or Frankie Trull, National Association for Biomedical Research (202-857-0540), should you or your staff have questions or require additional information.

Sincerely,

American Academy of Otolaryngology Head and Neck Surgery
American Association for Thoracic Surgery
American Association of Chairman of Departments of Psychiatry
American Association of Directors of Psychiatric Residency Training
American College of Physicians
American Federation for Clinical Research
American Heart Association
American Humane Association
American Neurological Association
American Physiological Society
American Psychiatric Association
American Psychological Association
American Society of Hematology
American Society of Microbiology
American Society for the Prevention of Cruelty to Animals
American Veterinary Medical Association
Animal Care and Welfare/SPCA
Animal Protection Association
Animal Protection Association of America
Animal Protection Institute
Animal Rescue Foundation

More...

Animal Rescue League
Animal Welfare League
Anna L. Haas Humane Society of Cobb County
Atlanta Humane Society
Association for Academic Psychiatry
Association for Academic Surgery
Association of Academic Departments of Otolaryngology
Association of American Medical Colleges
Association of American Universities
Association of Medical Schools Departments of Biochemistry
Association of Medical Schools Pediatric Department Chairmen, Inc.
Association of Orthopedic Chairmen
Association of Professors of Medicine
Association of University Anesthetists
Association of University Professors of Opthalmology
Association of University Radiologists
Bismarck Humane Society
Black Hawk Humane Society
Bonneville County Humane Society
Boone County Humane Society
Broome County Humane Society
Citizens for Animal Welfare Education
Corinth Alcorn Humane Society
Federation of Humane Societies of Pennsylvania
Florida Federation of Humane Societies
Florida Humane Society
Forrest County Humane Society
Fund for Animals
Greenfield Area Animal Shelter
Gwinnett Humane Society
Halifax Humane Society of Volusia County
Humane Legislative Network
Humane Society for Animals
Humane Society in Tampa Bay
Humane Society of Bay County
Humane Society of Huron Valley
Humane Society of Seminole County, Inc.
Humane Society of the United States
Humane Society of Vero Beach
Humane Society of Warner Robins and Houston County
Iowa City Animal Shelter
Kentucky Humane Society
Lab Animal Magazine
Little Rock Department of Animal Control
Massachusetts Society for the Prevention of Cruelty to Animals
Michigan Federation of Humane Societies
Michigan Humane Society
Mississippi Animal Control and Protection Society
Mississippi Animal League
Missouri League for Humane Progress
Muscogee County Humane Society
Nashville Humane Society
National Alliance for Animal Legislation
National Association for Biomedical Research
National Association of State Universities and Land Grant Colleges
Oklahoma City Animal Control
Orlando Humane Society
Panhandle Animal Welfare Society
Panhandle Humane Society
Pharmaceutical Manufacturers Association
Progressive Animal Welfare Society
Pulaski County Humane Society
St. Charles Humane Society
Society for Animal Protective Legislation
Society for Neuroscience
Society of Academic Anesthesia Chairmen, Inc.

Society of Critical Care Medicine
Society of University Otolaryngologists
South Dakota Animal Welfare League
Stray Haven Animal Shelter
Surgical Infection Society
Tennessee Humane Association
Tippecanoe County Humane Society
University Association for Emergency Medicine
Webster County Humane Society
Western Pennsylvania Humane Society
Wisconsin Humane Society

WEDNESDAY, APRIL 16, 1986.

COMMODITY SUPPLEMENTAL FOOD PROGRAM

WITNESS

FATHER WILLIAM T. CUNNINGHAM, FOCUS: HOPE

Mr. TRAXLER. Mr. Chairman, I would like to introduce the Committee to Father Cunningham. Father Cunningham is the director of Focus: HOPE.

Mr. WHITTEN. It looks like he comes loaded with evidence.

Mr. TRAXLER. We are not going to put that all in the record. We are very pleased to welcome you, Father.

Father CUNNINGHAM. Thanks.

Mr. TRAXLER. It is good work that is done there by Focus: HOPE, and we are all awfully proud of that fact and your contribution and Eleanor's contribution to the program. It is one that the citizens of Detroit might very well be proud of, and we congratulate you and you may proceed.

Father CUNNINGHAM. Thank you, Congressman Traxler.

Chairman Whitten, let me tell you, you are a legend, even though we have not met you, there in Detroit because of the marvelous constant introduction you get from Congressman Bob Traxler and his good staff.

Mr. WHITTEN. We appreciate your statement. Bob and I have worked together a long time. We kind of brag on each other.

Mr. TRAXLER. I tell the truth about him, and he has to lie for me.

Mr. WHITTEN. We are glad to have you here, Father.

Father CUNNINGHAM. I have lied a little bit in my time, I guess, but I am not admitting to it at this time. This is truly my sense of appreciation to you, sir.

I am not going to read the testimony because if I do——

Mr. WHITTEN. We will put your full statement in the record, if you would like.

Father CUNNINGHAM. Yes. Well, neither of us will pay any attention if I read it. I think what I really want to do is just paraphrase it briefly for you.

Focus: HOPE has had a relationship with the Department of Agriculture for better than 10 years, I guess. It is not exactly a marriage made in heaven, but it has been productive. We have had a couple of good youngsters born out of that marriage. One is the program for feeding mothers and babies with commodity food, and that came at a time when our area of the country was badly hit and mothers and babies in the hundreds of thousands have been aided by that program. Presently we have nearly 4,700 mothers and children on that program in Detroit.

And the second, closer to this time, is the program for the elderly poor. It was begun as a pilot program for Michigan and Louisiana and Iowa, and it has been very effective over the last several years. The problem that I bring to you today has nothing to do with USDA, really, straight out, or with the effectiveness or goodness of the program. It is a conundrum, and I am not smart enough to solve it. Perhaps, Mr. Whitten, with your help we can get it solved.

It has to do with two things: First is the old people, and these are very poor people Some time ago with a good deal of help from your Committee and Mr. Traxler, we decided to have a pilot program to see if we could use these good commodity foods, really good stuff, to inexpensively take care of the increasing need of old people who are on diminishing kinds of resources. I am talking about people in their 70s and 80s living on less than $300 a month. And the program worked. It worked well, worked cheaper than anything we ever dreamed of. It was a direct program. We put a lot of volunteers in touch with a lot of old folks. That is the way it worked. And so we took care of, well, presently, over 8,000 elderly people on that program.

Then, in the wisdom of this good body here and under your direction, the Department of Agriculture was asked to extend the program and expand it and make it available in other parts of the country who had commodity programs. And so we said that is good news; we are going to be able to take our expanded list—you know, as we are getting mothers and babies off the program and getting mothers trained and getting them jobs, we will be able to put the old people in place on the program and feed them with the food we have.

Well, the old people knew about that, of course, and what I bring with me now is not statistics but this big bundle of stuff here. This is a list of the names, addresses, condition and salary and Social Security number of 16,001 elderly people as of the day before yesterday, waiting in line to get on our food program. We have got lots of room for them, but we have not yet had the permission and the regulations allowed us by the Department, after months and months and months of struggle, to get these folks on the program.

What we are saying is the way you get on our program now, up until a few months ago, the way you got on this elderly program is you waited for somebody to die. When somebody died, we called up the next person; and if they were not already dead, they got to come on the program and get food.

Now, in some strange collapse of logic, we are hearing from the Department through the developments out of Office of Management and Budget that when the old person dies, the slot dies. There is going to be no room for anybody else to come aboard. Now, that is the first problem.

The second problem is the problem of budget. I want to repeat that Focus: HOPE is a civil human rights organization. We are not a food program. My God, if I had my way, I would get everybody off food programs. People should not have to be on food programs. The vast majority of people out there will be productive, have jobs, and contribute. So we have enormous energies on training people. We have an industrial complex. We are providing thousands of jobs here. We are doing a good job at it. It is costly but it is effective, and once we get a good person trained and get him into the machinist trade or get him into one of our plants, we have got a whole company of just AFDC mothers that we have taken off the food program. It is working well.

But this last year, because we got shorted over a half a million dollars on the budget, despite your efforts' despite the legislation, despite all kinds of legislative history and testimony on and on and on, that happened and everybody at USDA says, hey, you are going to get it. Well, now it has been a year-and-a-half.

In the meantime, we have got to put those resources into—I am not going to turn the old folks away. I am not going to turn the folks away who have got a right to the program. So Focus: HOPE has had to direct its resources for training into feeding people. It seems to me that is counterproductive, particularly to the Administration's good guidance for this country, because of some kind of mistaken priority there in OMB or wherever. So that is one thing.

Now, you can imagine running a business like this. This year, with six months into the program, we still do not have a budget. We do not have a budget. We do not know what it is we are supposed to spend or what it is we are not going to be able to spend. So the two things, I guess I bring to you, it is not right with the law on the books, with the clear direction of Congress, with all of the enormous amount of history of the legislation, for folks to say we are not going to let you feed the old people and we are going to take it back retroactive; and when they die, we will whittle the program down until they all die. And I guess that would be about ten years.

The second thing is that money ought to be coming through because, doggone it, if it were my IRS, they would charge me interest and a penalty. And these birds do not do that. See, they have got $600,000 worth of our money, and we are not going to get any interest on that. In fact, we are going to lose a lot of money because of somebody's effort, I think, to dismantle this good program.

That is pretty much the end of what I had to say. I love to say our frustrations with people that can do something about it.

Thank you.

Mr. WHITTEN. Well, may I say that we appreciate your appearance here. There are so many things that lead into these matters that it is hard to touch base with all of them.

In the first place, it is very seldom recognized that Congress just passes the laws. After that it is in the hands of the Executive Branch. They write the regulations. They do the administration.

Most of the time you have got folks in the Department of Agriculture who want to cooperate. I said most of the time. That has not been true for the last several years. Those in charge now seem delighted to cut back and cut out. We had the man who heads Farmers Home Administration before us this year for the first time. As you know, FmHA is the lender of last resort for farm loans and for rural housing loans, and other things. Although not required by law, he has issued regulations requiring prospective borrowers to pay all they owe and show that, under the new farm program, they could break even or make money. Of course, nobody can do that.

I checked on my own district this morning. FHA has been able to approve less than one-third of the applicants who received loans last year and would be eligible again if they did not have this new regulation. We also had a problem up here with other programs by the Department. They say the President deferred them, which means Congress has to vote to reactivate them. The court says we have got to have both houses do it, which with the present political situation, is very difficult.

Well, in the supplemental bill that we have got pending now, I as the Chairman of the Committee wrote a provision setting aside this deferral, which in effect gives to a President the line item veto. In addition to that, we have many programs such as yours, perhaps, where the eligibility is decided by the state. So we have got to know the problems, so we can write the laws. And beyond writing the laws we do not have anything that we can do except urge the Administration to carry them out.

Now, normally we have quite a bit of influence with program direction, because they have got to come back and ask us for money next year. But when you have got officials that do not want the money, what do you do? That is what we have been faced with. If they do not believe in the program, what are you able to do?

We keep trying, as you do, but you can appreciate the problems we have. And this year, as I pointed out, the budget has recommended a $9 billion cut in agriculture, which means neglect of the land, neglect of everything. Now, those cuts would not be so bad if the money was going to reduce the deficit. But it is not. It is going for increased foreign aid and building up the carryover for military spending, a tremendous amount of money.

So I just want you to know we have got our problems, too. But the more we know, the better chance we have to try to work out something.

I was one of those that felt that what we should have done was strengthen the commodity program. In addition to whatever else, it would help get farm surpluses moving into world markets. In Puerto Rico for example, we do not have a food program; we give them the cash. Well, cash has a way of being mishandled more so than food stamps.

So we appreciate your being here, and we appreciate your problem. One of the other problems we have in trying to watch the food stamp program, is that we have a rule which provides that, if somebody comes by and says they are hungry, you have got to give them food stamps. We cannot say that is bad, but if anybody can do it, how are you going to keep a record. This is difficult when you do not know who is coming by, when he is coming by, and when folks running it at the local level do not know.

So how to bring this together is a problem, and we just do the best we can. It is about all we can do. As Chairman of the Appropriations Committee, I am on all of the subcommittees. So we have to get together and bring together the demands in this area, and the other areas, and then try to stay under a budget. And about that time along comes Gramm/Rudman saying you have got to cut it some more. Or you go to the Senate, and they say you cannot get anything new if you do not cut something else. I am trying to make you feel sorry for me.

[Laughter].

Mr. WHITTEN. Thank you very much for your appearance.

Father CUNNINGHAM. Thank you, Congressman.

Mr. TRAXLER. Mr. Chairman, as Father Cunningham knows, I want to express my appreciation to you for including in the supplemental some language in the bill which will restore $4 million to the Commodity Supplemental Food Program. And I hope that that bill will become law. That will free up some of the money for it, we hope. As the Chairman said, and he said it very eloquently and there is nothing that I can add, I would like to simply emphasize the very best programs can suffer immeasurably when they are improperly and, specifically and directly, poorly administrated because the administrators do not believe in the program and are making a concerted effort to sabotage them.

So we have to live with that kind of realization across the spectrum of government. We have ideologues who are totally dedicated to changing the direction of this government has been going in, and they are firmly committed to their convictions even though the vast majority of Americans do not agree with them. But they are the self-righteous who know the direction that we should go, and they cannot really believe we can trust people, and they know best.

But it is a constant effort on our part to reign them in, point out the law to them and direct them. They have vast discretion, and it is appropriate under normal circumstances. I regret to say that ideologues and true believers are not normal people. Consequently, it has been a very painful situation for many of us in this Congress who would go in different directions than what these people are. We are going to do all we can to help you.

Father CUNNINGHAM. Thank you, Congressman.

Mr. WHITTEN. Thank you very much.

Father CUNNINGHAM. Just one point. I do not have any metal detectors around my desk or office. I sit in the middle of a big city. There is a lot of violence. The folks do not have to go through 50 people to get to me. They come right in.

So the reason that I brought along this big list is because this is the way we deal with people. I could have brought you some statistics and put it on a scratch pad and said we have got X number. But what I have brought along was the names of old people that are hungry. I know you have got a problem here, but I am saying we solved that problem on the books and we solved it in a budget. We have got the food What we have got is a recalcitrance. We are not asking for more. We are simply asking for people to say yes so we can go ahead and take the food that we have with the people that are waiting there and give it to them. And that is the frustration.

Thank you.

Mr. WHITTEN. One of our major problems here is regulations that are written to strangle a program rather than improve it. That is my viewpoint. The man who wrote them may not see it that way, but that is the way it looks to us.

We appreciate your efforts.

Father CUNNINGHAM. Thank you, Congressman.

[The statement of Father William T. Cunningham follows:]

Testimony to the Committee on Appropriations
U.S. House of Representatives

By Father William T. Cunningham
Executive Director, Focus: HOPE

April 16, 1986

Focus: HOPE
1355 Oakman Boulevard
Detroit, Michigan 48238
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Chairman Whitten and Honorable Members of the Committee:

Focus: HOPE and the Agriculture Department have been in partnership for a decade and a half, using the abundance and the overabundance of the American farm to feed malnourished poor people in Detroit. It's a practical, successful program that deserves, and receives, high marks for both social conscience and low cost -- two areas that seem to be competing to the death these days here in Washington. One would think any program helping needy mothers, pre-schoolers and senior citizens at a cost that is a bean counter's delight would merit safe harbor from the slashing gales of the Gramm-Rudman latitudes through which all of us must sail. The fact that I'm here today indicates, of course, otherwise.

I am not here to saddle the Agriculture Department with the blame. And it may not be the place of Focus: HOPE at all to instruct the chair as to where the villain of this piece resides. But before I am through here, I hope I will have imparted some comprehension of Focus: HOPE's utter frustration, near financial collapse and deepest outrage on both moral and logical grounds, at the inept posturing and false economies brought forth by the Office of Management and Budget.

It is most gratifying that the members of this committee care enough about the Commodity Supplemental Food Program (CSFP) to give me this forum. But I suspect Focus: HOPE's recent experience in Detroit is not unique. More likely there is a national epidemic afoot, endangering other parties who -- like us -- thought the appropriations process was complete and that they needed "only" to go about operating their programs successfully.

The Congress itself is a victim, because spending has been authorized with the force of law only to be scoffed into a deadletter box elsewhere in Washington. The mind and will of the Legislative Branch regarding CSFP could not be more clear. Your intent is defined in the 1985 Food Security Act, in colloquies, in managers' statements and -- for those who bother to square such disputes with the historical record -- in evidence accumulated over 15 years of give and take.

Just a few months ago, in fact, Focus: HOPE was thanking this commitee and others in government who had the wisdom to provide two desperately needed items:

(1) Expansion of our Food for Seniors pilot program so we can start feeding some of the 16,001 old people now on our waiting list in Detroit, and so other CSFP operators around the country can launch their own Food for Seniors programs.

(2) Reimbursement to CSFP operators for storage of food and certification and education of program participants, at the very modest administration fee of 15 percent of all foods distributed.

Both of these items were approved by Congress, and Focus: HOPE celebrated the good fortune of the thousands of mothers, children and senior citizens who would benefit. It must have happened, because it was in the newspapers.

But the facts are these:

(1) Six months into the fiscal year we have not been paid a penny for the cost of distributing the bonus foods that represent 30 percent of our food programs, despite Congress's leadership in ordering that this be done. This defiance of law led Focus: HOPE, despite a proven efficiency record, to compile a deficit of more than half a million dollars. That red ink would have bankrupted a smaller organization. It nearly forced even Focus: HOPE to close the doors of its five food distribution centers. Now we have at last been promised the funding, but under a formula that remains to be seen -- and with no actual cash transfered until a formula is determined.

The tragedy of this situation is that our bottom line goal is the same as that of the budget slashers — to move people off our food programs into productive lives. But because of stonewalling tactics and shortsighted false economies, we have had to divert resources from our job training and job creation programs to take up the slack.

(2) Not one senior citizen has been taken off that waiting list.

Caseloads for CSFP and Food for Seniors, in fact, have been frozen retroactively.

This is the even greater tragedy. These thousands of seniors, many of them living on less than $300 a month, do not have the wherewithal to sit around waiting for the debaters to decide whether the program that Congress voted for will ever exist. God knows they don't have the time to wait.

Focus: HOPE will be reiterating the extent of need among our senior citizens before the Agriculture Subcommittee on Nutrition, where we will deliver a copy of that waiting list, complete with names, addresses and phone numbers just in case someone thinks we are dealing with statistics instead of helpless old people.

So who is culpable here? Frankly, I am less concerned with placing blame than I am with getting to the business we are supposed to be about — supplying food to those who need it and training as many as possible in the skills they need to be self-sufficient.

But I can tell you this: For months our finance officer, Anthony Campbell, has sought to make sense out of monthly base grant payments that varied haphazardly without explanation. He has made do without a program budget. He heard about the CSFP and Food for Seniors expansion, but what he sees is zero increase in our funding from the Agriculture Department. He sees a "surplus" designated to pay the Commodity Credit Corporation for bonus foods that the government already has paid for. (In the latter case he sees, gratefully, this committee alerting the Agriculture Department to its double-dipping error.) And every time we queried Agriculture on our problems, everything was in the hands of OMB.

Now, with half the fiscal year gone, we have just been promised by USDA that our administrative expenses will be released. So we have OMB to blame for six months of brinksmanship, which we trust will not be further extended by Agriculture. That's the big one, because it very nearly killed the program in Detroit. It is only because Focus: HOPE is an organization built upon optimism that I place the economic crisis in the past tense, and assume that our good friend John Bode and his colleagues will be cutting a check for us any day now.

Mr. Bode, in fact, has been in the main very collaborative with us in making every effort to see that the food programs adhere to congressional intent and are run well. That has been true of our various liaisons in the Agriculture Department through the years. Mr. Bode, however, has not always been as successful as he would like to be, and I believe that to be a result of pressure and interference from outside the department.

Mr. Chairman, it is an exhausting, expensive and non-productive struggle to have to dun the federal government for what it owes you — and what it owes its poor and elderly citizens. Small operators of the most worthy programs cannot sustain their efforts without budgets and without timely payments. We are fortunate in that you agreed to hear us, and that we were able to get here. Many others in this plight could not.

Given this forum, I hope I have been able to impress upon the committee why we simply are not not capable of accepting a compromise that offers us impossible alternatives: Receiving past-due monies to cover deficits in our reimbursement, or implementing programs approved by Congress to extend help to the thousands more who need it.

I hope the committee will agree with me that it is simply not palatable to think this government wants to pass a law, then make the people who fought for the law abandon, for weariness, a second struggle to see that it is implemented.

This situation is brought to the attention of this committee because of the compassion and common sense it has exhibited in the past. The disposition of these facts is for you to decide, but may I respectfully suggest that perhaps the Congress -- though it understandably may seem redundant — should spell out to the Secretary of Agriculture the exact intent of this body regarding the Commodity Supplemental Food Program.

Father William T. Cunningham
Executive Director, Focus: HOPE

WEDNESDAY, APRIL 16, 1986.

ANIMAL WELFARE ACT

WITNESS

PATRICIA FORKAN, VICE PRESIDENT, PROGRAM AND COMMUNICATIONS

Mr. WHITTEN. We turn now to Miss Patricia Forkan of the Humane Society of the United States. You may proceed.

Ms. FORKAN. Mr. Chairman, thank you very much. I appreciate the time that you have given us to talk about our tales of woe. I guess you heard about them all day long, and in this case we do have real tails, actually. We have dogs, cats and a few other animals.

My name is Patricia Forkan. I am Vice President for Program and Communications for the Humane Society of the United States. I would like to submit my testimony in full for the record and summarize it for you

Mr. WHITTEN. We will be glad to have it done that way.

Ms. FORKAN. We are here because we are extremely concerned about the fact that the budget for the Animal and Plant Health Inspection Service, as it relates to the Animal Welfare Act, has been zero budgeted. We find this extremely disturbing because this is a program that is very cheap in terms of other programs and it covers millions of animals who, we believe, desperately need to be covered by uniform Federal standards.

We know the kind of work that you have done, Mr. Chairman, and this Committee has done over the years to keep this program going and funded. And we certainly appreciate that.

The Humane Society of the United States has not always agreed with the way APHIS has handled the Animal Welfare Act, but we think that the work that they have done is absolutely crucial. Interest groups such as ours have our own investigators out there looking to see what is going on. And frankly, we think there are a lot of problems and that the Animal Welfare Act has not solved them all.

However, it gives us a mechanism through which we can help them work to solve their problems, and we think it is crucial that this law be continued uninterrupted and at least with the minimum funding that you have given it over the past few years.

Let me give you some examples. What would happen if there were no Animal Welfare Act? I asked our investigators to give me some idea of what might be the outcome if there were no Animal Welfare Act. And I got reports from our laboratory animal specialist who said if there were no Animal Welfare Act there would be absolutely no protection for animals, because almost no states provide special protection for animals in laboratories, everyone would be doing there own thing, and there would be no uniform standards. And even the accreditation program that the laboratories have for themselves, only one-third of those laboratories even can qualify under the accreditation. So there is no standard way that we can protect laboratory animals without the help of the Animal Welfare Act.

APHIS has said if we do not have this act, then groups like ours can go in and enforce it. Well, I am sure you can imagine how far we would get if we walked up to a laboratory door, knocked on it, and said we are here to enforce the Animal Welfare Act. I think we would get sent right back out to the parking lot immediately.

So it is obvious to us that we need APHIS as our access point to do this.

Let us talk about zoos and circuses. According to our department that specializes in this, for the most part animal exhibits are low budget operations. They lack any degree of professionalism. There are about 800 zoos in this country, but only 97 of them actually meet their own accreditation standards. Therefore, regular inspections by the APHIS personnel are absolutely crucial.

We still go to zoos and we still look at them and we still find far too many animals are going uncared for with a great deal of problems in terms of diet and cage size, but at least when we find these things, we can approach APHIS and they will intervene and, on those cases, try to do something to alleviate the problems.

Puppy mills is another area we have done an enormous amount of work. We have had undercover investigators go to nearly 450 puppy mills over the past five years. We continue to find a number of deficiencies, but we are working with APHIS to try to upgrade these facilities. And we also have found that dealers that are selling to laboratories and selling through flea markets and to universities also are not still up to the standards we like, but at least this gives us the mechanism to work through to ensure that the welfare of those animals is as best as we can do minimally cared for.

I think that our feeling is that it is not a hundred percent working. We think that they never really have had the kind of money to make this program work, but we do think that, at the very least, the program can be funded for fiscal '87 at the same level, as I believe you have received a letter from a number of us, of about $5,898,000 and an additional three-quarters of a million to fund the new law which was passed by Congress last year.

So I think that you have probably heard testimony similar to this, but I just want to reiterate that it is extremely important. I think that the kinds of things going on in the animal welfare world today tell you that the public is extremely interested in what happens to animals in laboratories, in zoos. And frankly, the only thing between great public outrage that nothing is being done, and at least something being done is the Animal Welfare Act.

So I would like to thank this Committee for the tremendous support you have given us in the past in help getting this program funded and ask that you fund it at least at the level that it was funded last year with the additional money to help bring along the library program that was put into effect this year.

Mr. WHITTEN. Thank you very much. I want to repeat what I said earlier. We thank you for your interest but I do not know what we can do with the overall budget situation. I am talking about agriculture generally.

Ms. FORKAN. I know. I know.

Mr. Whitten. The tragedy, though, is OMB has put agriculture in a low priority and has put things that I do not consider near as important in a higher priority.

Ms. Forkan. Well, I think that their priority, however, can be raised a little bit with the interest of this Committee. And I think it has in the past, and I do——

Mr. Whitten. We are certainly going to try it. But our hands are full trying to keep what we have got, which makes it more difficult to increase anything. I am just saying the reality is there. You just have to look at the record. But we do appreciate your problem and will do the best we can.

Ms. Forkan. And perhaps we can work with the Committee to find other places that we might find money to transfer. If we take it with one hand, we want to find it with another.

Mr. Whitten. The other places have been cut to the bone themselves.

Ms. Forkan. Well, I am sure we can find a few bones to gnaw on.

Mr. Whitten. Well, I do not know. We might write you and see what you would cut out.

Mr. Traxler. Mr. Chairman, let me ask Ms. Forkan, in the budget resolution what category do you come under? Is it research?

Ms. Forkan. Well, it is actually animal welfare. It is called animal welfare.

Mr. Traxler. There is a category for animal welfare in the budget?

Ms. Forkan. Yes. For the Animal and Plant Health Inspection Services, there is actually an actual category for that.

Mr. Traxler. What I am speaking of, however, is in the budget. Not the President's budget, but in the budget resolution of those various ones under agriculture, just the broad agriculture category. All right.

Ms. Forkan. Yes. Okay.

Mr. Traxler. Thank you very much. That helps me understand. We will do all we can for you.

Ms. Forkan. All right. Thank you very much for your time. I appreciate it.

Mr. Traxler. We will welcome your assistance, I might add.

Ms. Forkan. Well, we will do what we can.

Mr. Whitten. Thank you very much.

[The statement of Patricia Forkan follows:]

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TESTIMONY PREPARED FOR
THE U.S. HOUSE OF REPRESENTATIVES
THE COMMITTEE ON APPROPRIATIONS
and
THE SUBCOMMITTEE ON AGRICULTURE, RURAL DEVELOPMENT, AND RELATED AGENCIES

Presented by
The Humane Society of the United States
Patricia Forkan
Vice President
Program and Communications

April 16, 1986

MR. CHAIRMAN AND MEMBERS OF THIS SUBCOMMITTEE, I am Patricia Forkan, Vice President for Program and Communications for The Humane Society of the United States (HSUS), the nation's largest animal-welfare organization. On behalf of our more than 400,000 constituents, many of whom we share with you, I appreciate the opportunity to present HSUS concerns about continued and adequate funding for enforcement of the Animal Welfare Act, which is administered by the Animal and Plant Health Inspection Service (APHIS).

The Animal Welfare Act was passed in 1966 and has been amended in the past 20 years extending protection to require adequate food, water, and housing to those animals kept in laboratories, zoos, circuses, and puppy mills, as well as those sold for research purposes by animal dealers. The most recent strengthening of this Act came in December, 1985, when important new provisions were added to afford better protection for laboratory animals. Although millions of animals are affected under this Act, the Office of Management and Budget (OMB) has committed an unconscionable act in recommending that APHIS' budget for enforcement be eliminated.

Funding for the Animal Welfare Act is a perennially afflicted item in the President's budget. Since FY 83, the Administration budget has recommended either major cuts or--as with the FY 86 and 87 proposed budgets--complete elimination of the program. While The HSUS has not always agreed with APHIS about the adequacy of enforcement, APHIS has been charged by Congress with vital inspections that no other arm of government is allowed to do. The HSUS has continuing concerns about the animals protected by the Act, we consider its continued ongoing and uninterrupted enforcement critical.

I would like to outline some of our concerns about specific areas of animal suffering, should this funding not be restored.

1. Laboratory animals: The original Animal Welfare Act was enacted for the protection of the millions of animals used in research. At a time when the federal government spends billions of dollars to fund biomedical research, it is an outrage that this same government should eliminate the paltry sums budgeted last year for inspections of lab animals in these facilities. Since most state laws exempt research, teaching, and testing from their cruelty statutes, the Animal Welfare Act affords the only uniform, legal protection for these creatures. And, because the 99th Congress has given its overwhelming support for improvement of standards for lab animals, it is fitting that this subcommittee appropriate enough money for APHIS to carry out its mandate.

2. Zoo and circus animals: Under the Act, APHIS is also charged with licensing and inspecting the almost 1100 licensed animal exhibits across the nation. This group includes zoos, circuses and travelling shows, most of which keep a large number and wide variety of wild animals. We regularly encounter situations where even

the most basic needs of the animals go unmet. Most commonly, deficiencies occur in the areas of shelter, sanitation, diet, cage size, and veterinary care. In the most extreme cases, APHIS has had to intervene in instances where animals have been physically abused. Given the special needs of these diverse species, as well as the large number of existing exhitors, uniform federal standards and inspections are vital to the well-being of these wild animals.

3. Puppy mills: Puppies bred in kennels that mass-produce dogs for pet shops are often victims of filth, inadequate shelter, insufficient food and water, disease, and lack of veterinary care. Since 1970, the Animal Welfare Act has required commercial breeders who wholesale puppies to the pet industry to be licensed and regulated by APHIS and to meet humane standards of care for their dogs. Continued APHIS inspections are vital in order to upgrade or eliminate substandard breeders.

4. Dog- and Cockfighting: Dog- and cockfighting are two terribly cruel blood sports that entail pitting two dogs or roosters together in a small enclosure while cheering spectators place bets on which animal will survive. In 1976, the Act was amended to prohibit these "sports." However, a consistent lack of adequate funding has prevented APHIS from enforcing these provisions.

5. Animal dealers: APHIS enforcement of the Act also requires licensing and registration of animal dealers who buy and sell dogs and cats for biomedical research and testing. These animals are often taken from animal shelters and humane societies, or sometimes are stolen pets. Flea markets and auctions provide dealers with another source of animals. APHIS has been instrumental in the investigations of research animal dealers who maintain their animals in substandard conditions. APHIS has recently closed the operation of one of the most flagrant violators of the Act. In addition, pressure from APHIS caused one of the nation's most prestigious universities to stop its acquisition of animals from substandard dealers operating out of a flea market. APHIS's continued presence is crucial in this area.

In short, the money you have appropriated to enforce the Animal Welfare Act has been money well spent. By restoring the funding the Administration has cut each year since FY 83, you have improved the living conditions for literally millions of animals.

This year, we ask your help again. In FY 86, USDA spent $5,898,850 to administer the provisions of the Act. Given the additional requirements for lab animals passed by Congress in December, 1985, additional funding is necessary in order to comply with the new provisions that, in affording new protection for lab animals, require that a lab animal-welfare information service be established at the

National Agriculture Library, in cooperation with the National Library of Medicine. It is conservatively estimated that $750,000 will be necessary to begin this service.

Given this new mandate from Congress, The HSUS is requesting that this subcommittee, in its wisdom and compassion for animals, appropriate the sum of $6,648,850 for FY 87 as the minimum amount required to implement the Animal Welfare Act, as recently amended. We appreciate your past response to the needs of the animals protected under this law. Once again, we ask that you act to fill the void left by OMB.

WEDNESDAY, APRIL 16, 1986.

ANIMAL AND HUMAN HEALTH

WITNESS

DALE K. SORENSEN, D.V.M., Ph.D., ASSOCIATE DEAN, COLLEGE OF VETERINARY MEDICINE, UNIVERSITY OF MINNESOTA, ST. PAUL, MINNESOTA

Mr. WHITTEN. Next we have Dr. Dale Sorensen of the American Veterinary Medical Association.

Doctor, we will have your statement appear in full in the record, and we will be glad to hear from you on the highlights.

Dr. SORENSEN. Thank you, Mr. Whitten. You have my written statement, and I will try to summarize some of the more important concerns that we have. First, I would like to thank you for the opportunity to present the American Veterinary Medical Association's recommendation for the fiscal year '87 appropriations for the U.S. Department of Agriculture.

There are several programs in the U.S. Department of Agriculture that address some vital issues which are of concern, and these have been slated for cutbacks or outright elimination in the Administration's budget. And I would specifically like to call your attention to five areas: One is the Animal and Plant Health Inspection Services budget; two, the Animal Welfare Act enforcement by APHIS; three, the level of animal health and disease research supported by the Cooperative State Research Service; four, the higher education graduate fellowships; and, five, the meat and poultry inspection activities of the Food Safety and Inspection Service. So I would just like to highlight these five areas.

First of all, in regards to APHIS, in the past APHIS has been very effective and productive in controlling livestock diseases in cooperation with station agencies. Yet the Administration continues to push the states and livestock producers to carry a greater share of the responsibility with diminished Federal involvement.

Recent rulings by the Office of Management and Budget may cripple USDA's ability to respond effectively to control some of these animal disease emergencies. OMB has ruled that USDA cannot use Commodity Credit Corporation funds to finance disease control, so that there would seem to be no source of emergency funding. We believe that there needs to be a source of emergency funding to handle dangerous disease situations as they crop up each year.

Another point I would like to make is that the Federal Government needs to maintain a strong role in the brucellosis eradication program if this program is to finally succeed. And we strongly urge that the present funding level be maintained to ensure that adequate disease control procedures can be carried out to eventually eradicate this disease.

I would like to very briefly reinforce some comments that have already been made by Christine Stevens and Patricia Forkan regarding the enforcement of the Animal Welfare Act. The Administration is expecting the states and the humane organizations to carry out the enforcement activities. We recognize that APHIS spent $5.8 million in fiscal year '85 to carry out its duties as prescribed under the Animal Welfare Act, which is a relatively modest sum in view that it is a national program.

Now, in the farm bill for '85, Congress made some amendments to the Animal Welfare Act that require additional funding. This was the establishment of a laboratory animal welfare information service at the National Ag Library. It is estimated that this will cost an additional $750,000 to start up this service effective in 1987. So the AVMA is urging and recommending that an appropriation of $6.6 million be funded for fiscal year '87, and we feel that this is the minimum amount required to carry out the APHIS responsibility for enforcing this act. I think, as we have heard this afternoon, this is a very, very crucial piece of legislation that is necessary in order to really carry out and ensure that the high quality of animal care is provided for animals under the teaching research programs throughout the country.

We have another issue I would like to very briefly comment on. In the budget for science and education, there is a concern about the funding for the animal health and disease research. Prior to fiscal year 1979, there was a very limited amount of funds which were appropriated for veterinary medical and animal disease research. And this was through the Hatch Act program. But in the 1977 farm bill, the first Federal program designed specifically for animal health and disease research was included in this bill. So since 1979 additional funds have been available.

In the current fiscal year '87 budget, it is proposed that these two programs be eliminated, and so I am suggesting here that they be reinstated. I think that there is an urgent need for a permanent funding base to the Section 1433 animal health program. This is needed to provide a foundation for research capabilities so that these other additional competitive grant programs really can be carried out.

I would like to comment that the legislation already is in force as far as the Section 1434 area which enables the scientific community to apply biotechnology to animal health and disease problems. So we would urge that some funds be appropriate in this category.

I would also like to urge a continuation of the special grants program which was eliminated in the President's budget. This is a competitively reviewed animal health granting program, and at the present time this grant program just addresses the highest priorities that are designated. In other words, the leading economic disease problems affecting food animal agriculture are addressed in this particular program. So we feel that this is very, very essential if we are to maintain our competitive role in animal agriculture.

One final concern, and that is the need to develop scientists for the future. The initial funding for the graduate fellowship program in fiscal year 1984 was an important step, and we would like to urge continuation of this program in 1987.

So, in summary, I would like to urge our specific funding recommendations: That the Hatch Act be increased to $164 million; that the animal health Section 1433 funds be restored to and increased to $6 million; that the animal health special grant program be continued with a slight inflationary increase; and that the graduate fellowships be restored to $5 million in the '87 budget.

I guess one final comment I would like to urge also is that the meat and poultry inspection programs of the Food Safety and Inspection Service should also receive some priority. I think we have seen during the past couple of years several national issues here regarding the safety of our meat and dairy and animal products. I think that we need to ensure that our consumers are getting protected when they buy these foods. So we would like to recommend that continuation of the funding be made for meat and poultry inspection service. We feel that the Congress should appropriate funds for the program rather than depend on a user fee, which is the recommendation of the President's budget. We think that there is a minimum of $380 million that needs to be appropriated for fiscal year '87 for the operation of the Food Safety and Inspection Service.

So, in summary, these are the recommendations that the American Veterinary Medical Association would like to make to the Appropriations Committee, and we hope that Congress will support these recommendations for fiscal year '87.

Mr. WHITTEN. Doctor, thank you. I think I have explained in your presence what a problem we have this year. But we do value your thoughts and your presentation. I do not know what we will be able to do.

Dr. SORENSEN. Thank you, Mr. Whitten.

[The statement of Dr. Dale K. Sorenson follows:]

Recommendations
# of the
American Veterinary Medical Association
on
Appropriations
for the
U.S. Department of Agriculture

presented to the
Agriculture, Rural Development and Related Agencies Subcommittee
of the
Committee on Appropriations
House of Representatives

by
Dale K. Sorensen, D.V.M., Ph.D.
April 16, 1986

Mr. Chairman and members of the subcommittee, I would like to thank you for the opportunity to present the American Veterinary Medical Association's recommendations for the FY 1987 appropriations for the United States Department of Agriculture.

Animal health frequently affects the health of people as well as agricultural productivity and profitability. Several USDA programs address this vital area, yet have been slated for cutbacks or outright elimination in the administration's proposed budget.

We recommend strong support for the following major programs:

- Animal and Plant Health Inspection Service (APHIS) livestock disease control including animal biologic product regulation
- Animal Welfare Act enforcement by APHIS
- Animal health and disease research supported by Cooperative State Research Service (CSRS) grants
- Higher education graduate fellowships
- Meat and poultry inspection activities of the Food Safety and Inspection Service (FSIS)

APHIS has been effective and productive in controlling livestock diseases in cooperation with the states and private practicing veterinarians. The administration continues to push the states and livestock producers to carry larger shares of the responsibility with diminished federal involvement. We are doubtful that the livestock producers will be able to maintain these programs without substantial federal participation.

Recent rulings by the Office of Management and Budget may cripple USDA's ability to respond effectively to control animal disease emergencies. OMB has ruled that USDA cannot use Commodity Credit Corporation funds to finance disease control and eradication activities in an emergency situation. Some source of emergency funding must remain available to permit immediate, effective response to dangerous disease situations.

The federal government must maintain a strong role in the brucellosis eradication program. If federal support is drastically cut, states with low incidence of the disease will try to maintain that status by limiting the interstate shipment of cattle, and thus restrict interstate commerce. AVMA recommends that the present funding level be maintained to ensure adequate herd testing, infected herd depopulation, first point-of-concentration testing and calfhood vaccination -- all essential elements in eradicating the disease.

The APHIS animal biologics regulatory program exists to protect public and livestock health. Funds for its operation should continue to be appropriated by the Congress.

The budget proposes again to eliminate funds for enforcement of the Animal Welfare Act. The administration expects the states and humane organizations to carry out the enforcement activities. Scarce resources and wildly differing standards render this an impossible expectation. We understand that APHIS spent $5,898,850 in FY 1985 to carry out its duties as prescribed by the Animal Welfare Act — a comparatively modest sum in view of the signficance of the national inspection program. In December, 1985, Congress adopted amendments to the Act that require the establishment of a laboratory animal welfare information service at the National Agriculture Library in cooperation with the National Library of Medicine. It is conservatively estimated that $750,000 will be necessary to start the service in FY 1987. For the Animal Welfare Act, we recommend an appropriation of $6,648,850 for FY 1987. This sum is the minimum required to carry out APHIS responsibilities for enforcing the Act and implementing the newly mandated information service.

In the budget for science and education, our concerns center on funding for animal health and disease research. Prior to FY 1979, a limited amount of animal health and disease research was carried out in veterinary medical institutions through the Hatch Act program. The first federal program specifically designed for animal health and disease research in veterinary medical institutions, excluding the Agricultural Research Service, was first authorized in the 1977 farm bill. Since then, the animal health and disease research (Sec. 1433) and special grants programs have had a marked, positive impact on the amount of animal health research being conducted. The advances spawned by this research benefit both humans and animals.

The wealth of veterinary scientific manpower available in our nation would address many more animal disease problems, if financial support were available. Livestock disease problems exact a large economic toll, and this veterinary manpower resource, currently untapped, could produce beneficial results if given the opportunity.

A permanent funding base to the Section 1433 program is essential to provide a foundation for research capabilities, which can then be built upon with targeted research supported by competitive-type grants. This program is used in different ways in different institutions, depending on their most critical needs. The support may be used to fund exploratory research, work on local disease problems or help maintain food animal herds for research.

AVMA supports the effort to bring greater emphasis to the application of biotechnology to agriculture. The competitive grants program is an excellent vehicle for this effort. The competitive-type research grant program authorized in Section 1434 would also work well in applying biotechnology principles to animal health and disease problems.

We also recommend a continuation of the special grants program under the current format. The competitively reviewed animal health and disease research component of this program is an important element in USDA's extramural research.

All these research activities, necessitate a continued recognition of the unique resources that veterinary schools and veterinary science departments offer. The considerable biomedical and biotechnological resources at medical schools and other research institutions may apply to animal agriculture, but research on the diseases of food animals must ultimately be done with these animals, in the institutions that have the expertise. There is no question that this is expensive research, but the payoffs for the nation's agriculture and, ultimately, the consumer will be substantial.

The need to develop scientists for the future is a growing concern, shared by veterinary medicine. The initial funding of the graduate fellowship program in fiscal 1984 was an important step, and we strongly encourage the continuation of the program in 1987.

We support the recommendations of the National Association of State Universities and Land Grant Colleges regarding funding for these research programs in 1987. We urge the subcommittee to support research and education at these levels so that our agricultural research community will continue to make progress toward the control and prevention of the variety of diseases that hinder the livestock industries.

Our specific funding recommendations are:

Hatch Act	$164.3	million
Animal Health (Section 1433)	6.0	million
Animal Health (Special Grants)	5.964	million
Graduate Fellowships	5.0	million

The meat and poultry inspection programs of the Food Safety and Inspection Service are very basic national and international public health protection activities. Their traditional effective operations must be continued and new technologies must be utilized to assure the safety of meat and poultry products. Furthermore, consumers must learn what protection they may expect from inspection activities, and what responsibilities they must assume for themselves. We concur in the recommendations of the National Association of Federal Veterinarians regarding funding for meat and poultry inspection include the following:

- $380 million be appropriated for FY operation of FSIS.
- A national education program be established to inform consumers about safety measures for handling red meat and poultry.
- Congress appropriate funding for the program, rather than depend on user fees.

The preceding remarks summarize the recommendations of the American Veterinary Medical Association for the Department of Agriculture for FY 1987. These critical programs affect our nation's health and economic well-being. It is imperative that they continue to be supported by the Congress for FY 1987.

WEDNESDAY, APRIL 16, 1986.

RESEARCH, EXTENSION AND PROTECTION

WITNESSES

MIKE WEHLER, PORK PRODUCER, MEMBER OF NPPC EXECUTIVE COMMITTEE, AND CHAIRMAN, NPPC PRODUCTION TECHNOLOGY POLICY DEVELOPMENT GROUP

DOYLE TALKINGTON, NATIONAL STAFF

Mr. WHITTEN. Mr. Mike Wehler, National Pork Producers Council, is next.

Mr. WEHLER. Thank you, Mr. Chairman. I have Doyle Talkington from our national staff also.

I am a full-time pork producer from Plain, Wisconsin, an area where we had a pretty tough winter this year, but fortunately things have come a little bit for the better and we are now starting to get in the fields and make some progress in that area.

We appreciate the opportunity to appear before your Committee, and we appreciate the courteous way we have been received in past years. I will summarize our information for you, if you so wish.

Mr. WHITTEN. We are glad to have you proceed that way.

Mr. WEHLER. The budget under consideration here today is of great importance to our organization and its members. We are concerned about the allocation of agricultural research, teaching, extension, and protection dollars. These areas have a great impact on profitability of our members. In these difficult times in agriculture, where the margins are so narrow, any areas that impact our profitability are very important to us.

First of all, in the agricultural research services budget, in the area of research dollars for animal agriculture, we continue to be concerned that while animal agriculture provides about 50 percent of the total agriculture income, we lag behind other areas of agriculture in research dollars being expended in animal agriculture.

As you know, consumers are the ultimate beneficiary of agricultural research through lower prices paid for efficiently produced products. As you also know, animal agriculture shows a high rate of return on investment from research dollars. Swine research heads that list in regards to high rate of return.

In consideration of the Cooperative State Research Service budget, we would recommend that $6 million be appropriated there in the animal health research area under Section 1433. In the special grant program, we believe that $6 million for animal health research should be restored as a budget item.

We are pleased to see that the $4.5 million in the competitive research grant area in animal science has been included in the Administration budget.

NPPC also supports an increase in competitive research grants for biotechnology, but we think there are opportunities here for the producer to become more efficient. And with this slim margin that we have in agriculture, and pork production in particular, this continues to be important to us.

As far as the Federal Extension Service is concerned, we feel that the cuts are way too deep and far-reaching to be acceptable to pork producers. The Extension Service has a long impressive record of being instrumental in technology transfer from research to the farming level. In this time of economic stress on pork producers and all farmers, the need for efficiency, as I said earlier, is very important to us.

The proposed cuts would cut Extension Services work force in half nationwide and would affect direct farm services as well as 4-H and other programs, as you well know.

In addition to that, state cuts will impact additionally the extension program to where we really do not know where we are at at this point in time.

It is very critical to pork producers that the Extension Service be funded so that programs that are beneficial, particularly to the swine industry, can continue to be utilized. The Residue Avoidance Program is important to our industry in maintaining safety and purity of product. A program in the Extension Service called FARAD, Food and Animal Residue Avoidance Program is no longer in the budget, and is very important to our people and also many other sectors of agriculture. With the recent Heptachlor problem in milk in the South, I am told this program was very beneficial to dairy producers in dealing with this problem.

Another area in the Extension Service program called STAGES, which is Swine Testing and Genetic Evaluation System, this type of a program is helping producers to produce that model kind of animal that will be more acceptable to the consumer and continue to provide a nutritious, meaty pork product to the consumer. Those are two very important programs within the Extension Service that we wish to see continued funding.

Also in that area, we are asking that the line item pseudorabies be restored, and that would be in the APHIS budget, and that $1.5 million be budgeted for these programs.

USDA and APHIS have been very cooperative over the last three years in the initiation and administration of pseudorabies pilot projects. The use of pilot projects to evaluate pseudorabies control and eradication procedures is essential for the establishment of an industry-wide position. These pilot projects have been successful in helping us to better understand this disease, but many unanswered questions remain.

As you know, pseudorabies affects several species of livestock and pets, so it is not just a problem that affects the swine industry.

The National Pork Producers Council is very closely involved with and very much impacted by the programs being discussed here today. We appreciate your consideration of our views as we strive to provide the American consumer with a safe, wholesome diet, balanced with nutritious pork.

Thank you.

Mr. WHITTEN. Thank you for your statement. I think you have heard some of our statements about what we are up against this year. We do appreciate your interest and realize there is value in each of these proposals.

Thank you very much.

[The statement of Mike Wehler follows:]

NATIONAL PORK PRODUCERS COUNCIL
P.O. BOX 10383, DES MOINES, IOWA 50306 PH (515) 223-2600

STATEMENT TO THE
U.S. HOUSE OF REPRESENTATIVES COMMITTEE ON APPROPRIATIONS
SUBCOMMITTEE ON AGRICULTURE, RURAL DEVELOPMENT
AND RELATED AGENCIES
WASHINGTON, D.C.
WEDNESDAY, APRIL 16, 1986

PRESENTED BY MIKE WEHLER, PORK PRODUCER; MEMBER OF NPPC
EXECUTIVE COMMITEEE; AND CHAIRMAN, NPPC PRODUCTION
TECHNOLOGY POLICY DEVELOPMENT GROUP.

Mr. Chairman and Members of the Committee:

We thank you for the opportunity to appear before your subcommittee. Representatives of the National Pork Producers Council have been afforded this opportunity for many years and are always courteously received, which we do appreciate.

The National Pork Producers Council represents 110,000 pork producers and their families in 38 states which are affiliated with the national organization. The NPPC represents virtually all of the commercial pork production in the United States.

The budget under consideration here today is of great importance to our organization and its members. We are very concerned about the allocations for agricultural research, teaching, extension, and protection. These areas all have a great impact on the profitability of our members. In fact, as demonstration of this concern, NPPC cooperates directly and indirectly with the various government agencies in each of these areas.

The NPPC feels strongly that a high level of research is needed just to maintain our position in productivity, efficiency, disease control and prevention, food safety, product research, and human nutrition. An additional increment of funding helps the industry to make strides forward.

As for extending the knowledge gained, NPPC works very closely with the federal and state Extension Services. We provide many materials and forums to gather the information for subsequent extension to our membership. This activity is fundamental to progress. The information must not only be developed, but it must be transmitted to the users for adoption.

The NPPC has also been interested in the disease surveillance and health protection activities of the USDA. In accord with our feelings, we provided financial cooperation to the federal government to promote the initiation of pseudorabies pilot projects. Many other areas of interest saw expanded NPPC and federal agency discussion and cooperation as well.

The nation's pork producers, as represented by the National Pork Producers Council, are cognizant of the tremendous budget deficit that the government faces. We are concerned about the effect of this deficit on the nation's economy and support emphasis to reduce the deficit. Although the deficit and the appropriations for the entitlement programs in the Department of Defense makes the amounts that we are discussing seem insignificant, we are aware that increases must be compensated for by decreases in all the budgets if our efforts to reduce the budgetary deficits are to succeed.

Agricultural Research Service (ARS)

The research expenditures for the improvement of animal agriculture are not proportional. We are concerned that the funds for animal agriculture research have steadily fallen behind the funds that are available for other forms of research funded by the department. The livestock farmer produces approximately 50 percent of the total agricultural income; but unfortunately, animal agriculture never receives anywhere near 50 percent of the research dollars.

Consumers are the ultimate beneficiaries of agricultural research through lower prices paid for efficiently produced products. Animal agriculture shows a very high rate of return on investment in research, indicating that past expenditures were comparatively lacking. Swine research heads the list of high rates of return. It is therefore difficult for our producers to understand why there is such a disparity in the funds made available for animal and plant agriculture.

We are also convinced that for the animal or total agricultural research efforts to be successful in future years, that there does have to be additional funds for training young scientists. We recommend, therefore, that graduate fellowships for fiscal year 1987 be increased to $5 million rather than dropped, as proposed in the present budget.

Cooperative States Research Service (CSRS)

The Agricultural Experiment Station system with research programs distributed in all 50 states and U.S. territories, coordinated by CSRS and combined agricultural interests, brings together State and industrial resources with Federal funds to form the ideal partnership to provide answers to America's agricultural problems. Proper use of the knowledge generated by agricultural research through education and extension will assure the best application of it.

We are disappointed to see that the administration budget did not propose any funds for animal health research under Section 1433. We recommend, therefore, that Congress provide funds for the Section 1433 research at the $6 million level.

Animal diseases, pests and other health hazards often result in major losses which must be absorbed by the individual producer; however, the overall anticipated loss levels of the industry -- now over $14 billion a year -- are passed on to consumers. In the Nation's long-term outlook these losses have critical importance in terms of maintaining low cost animal products for consumers, in conserving energy resources required in animal production, and in meeting expending national and international requirements for high quality protein. Intensified and expanded research is needed to find solutions to the most serious animal health problems that limit the efficient production of animal food products. Recent technological advances in the biological and medical sciences that would be applied to veterinary medical problems under this problam offer promise of major breakthroughs in the diagnosis, prevention and control of food animal health hazards.

We also believe that $6 million for animal health research in the special grants program should be restored. We are pleased to see that nearly $4.5 million is again included in the administration budget for competitive research grants in animal science. We also support the budgeting of nearly $20 million for competitive research grants for biotechnology. We have stressed, in several statements, that there is a dire need for good research in animal production. The research bank has almost been exhausted, and we are now in need of real breakthroughs to allow animal production, to maintain its competitive position in the total agricultural industry. We believe there are exciting possibilities which can stem from biotechnology research. We are certain many will agree to a major increase in the competitive-grants research for biotechnology.

We are convinced that these increases in competitive research grants will increase the training of young scientists who are necessary for agricultural research to maintain its position in the scientific world. This basic research, which will be conducted under the competitive research grants program, is a fertile training field for young scientists who must fill the ranks of those senior scientists who are constantly being lost to attrition.

Federal Extension Service (FES)

The proposed budget cuts for Extension are far too deep and far reaching to be acceptable to pork producers. The Extension Service has a long impressive record of being instrumental in new technology transfer from research to the farming level.

In this time of economic stress on pork producers and all farmers, the need for efficiency is more important than ever. The Extension Service not only is instrumental in helping farmers become more efficient to enhance possibility for profit, but has recently responded well with financial and stress counseling to troubled farmers.

The proposed cuts would cut the Extension Services work force in half nationwide, and would affect direct farm services as well as 4-H and other programs not directly related to agriculture, but critical to their efforts.

It is very critical to pork producers that the Extension Service be funded so that programs such as the Residue Avoidance Program and Integrated Reproduction Management can continue.

The administration's intentions, that the proposed cuts in extension be predominantly in non-agricultural areas, may not be adhered to on the state level. This could compound some serious problems in agriculture in some states.

Animal and Plant Health Inspection Service (APHIS)

We are asking that the line item for pseudorabies be restored in the APHIS budget for Animal Health Programs and that $1.5 million be budgeted for PRV Programs.

USDA/APHIS has been very cooperative over the last three years in the initiation and administration of the Pseudorabies (PRV) pilot projects. The use of pilot projects to evaluate PRV control and eradication procedures is essential for establishment of an industry position on PRV.

The pilot projects have been successful in answering many questions about PRV, but unanswered questions remain.

Research establishing guidelines for large herds and continuation of the federal/state cooperative efforts in the pilot project areas would have several benefits.

In addition to gaining additional information needed for long-range planning, the progress that has been made toward control and eradication in the pilot project areas would be preserved and expanded upon, giving a good start to any industry efforts in the future. If these cooperative efforts are stopped completely, as proposed by the administration's budget, the resulting breakdown in PRV control efforts could allow these areas to become re-infected. This could hinder future efforts.

Conclusion

The National Pork Producers Council is very closely involved with, and very much impacted by, the programs being discussed here today. We appreciate your consideration of our views as we strive to continue to provide the American consumer with a safe, wholesome diet, balanced with nutritious pork.

WEDNESDAY, APRIL 16, 1986.

FOOD AND DRUG ADMINISTRATION

WITNESS

FRANK E. SAMUEL, JR., PRESIDENT, HEALTH INDUSTRY MANUFACTURERS ASSOCIATION

Mr. WHITTEN. We will now hear from Mr. Frank Samuel.

Mr. SAMUEL. Mr. Chairman, thank you for the opportunity to be here today. We have a statement which, if it is all right with you, sir, we will put it in the record.

Mr. WHITTEN. It will be put in the record.

Mr. SAMUEL. Thank you.

Since this is our first time before the Subcommittee, I would like to explain very briefly that we are here because we are concerned with our budgetary situation, that portion that relates to the approval of new medical technology. Our industry produces a variety of kinds of products for physicians and hospitals. Although some of our companies are related to pharmaceutical companies, we are not here to represent that and we do not represent that particular interest.

We are concerned about the FDA appropriation for some pretty simple reasons. First of all, the work load that FDA has to deal with for devices and diagnostic products is increasing and has been increasing pretty drastically. For example, the backlog of products that are subject to the premarket approval requirements have increased 50 percent from 1982 to 1985. That is the unfinished work that FDA has to do.

At the same time the number of improved clinical trials of new products that will eventually have to get FDA approval has increased 150 percent since 1980. Now, while the work load is increasing out there, the work force is decreasing. It has gone down for the Center for Medical Devices and Diagnostics by 80 people, 80 full-time equivalents since 1981.

Now, in order to deal with this problem of increasing work load and decreasing work force, it would take approximately a hundred full-time equivalents. We are not proposing that much. We propose an additional $5 million of appropriations to support approximately half of that needed increase. The other half, frankly, we think ought to come out of better management of the agency's resources. That is a matter that has concerned us a great deal, and we are hopeful that, with the Commissioner's attention and other people on his top staff, that some efficiencies can be made that will yield the other 50 full-time equivalents. But, frankly, it is a pretty simple problem. It is one that relates directly to the clinical wellbeing of the American people.

Just to pick one example, a product was approved last year which the Secretary of HHS said would save on the order of ten to twenty thousand lives a year. That means for every month that a product like that is delayed, a thousand people, let us say, die unnecessarily. That is the patient care problem that we are concerned about and the one that we hope you will be able to address as you consider this bill.

Thank you.

Mr. **Whitten**. Thank you very much for your presentation.

[The statement of Frank E. Samuel, Jr. follows:].

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STATEMENT

By

Frank E. Samuel Jr.
President
Health Industry Manufacturers Association

Before The

Subcommittee on Agriculture, Rural Development, and Related Agencies

Committee on Appropriations

United States House of Representatives

April 16, 1986

Mr. Chairman, I am Frank E. Samuel Jr., President of the Health Industry Manufacturers Association (HIMA), the trade association of the medical device and diagnostic products industry. Small companies comprise the bulk of our industry; two-thirds of HIMA'S 300 members have annual sales of less than $20 million.

Our industry's goal is to save and improve patients' lives. To do that, HIMA companies develop technologies -- from artificial organs to contact lenses -- that are often more akin to satellites than toasters, or even automobiles. For many devices, FDA requires a premarket approval, like that required for new drugs.

Patient care brings me here today for this, HIMA's first testimony ever on FDA's appropriation. We testify now because the Center for Devices and Radiological Health (CDRH) does not have sufficient resources to approve expeditiously the devices patients need.

I want to leave two points with the Committee:

- Despite progress under Commissioner Young's Action Plan, the resources proposed in the Administration's fiscal 1987 budget are insufficient to arrest a growing device lag. We believe the average length of device approvals could, in the near future, exceed the average length of drug approvals. An additional $5 million for CDRH -- about 1 percent of FDA's total budget -- could be a stitch in time.
- CDRH's resource shortage is not a mere budgetary abstraction. It has real consequences -- for the health of patients, for the incubation of tomorrow's advances, and for the competitiveness of the nation.

Growing Device Lag

Drug approval delays help put the device lag in context. Commissioner Young testified last week that the average length of a new drug approval is 24 months. He said that FDA, through steps in the immediate term, hopes to cut that average to 18 months.

The average length of a device premarket approval (PMA) is approaching 16 months -- a period that, based on 1982-86 data, will likely grow. If it does, the average length of a device approval could, in the near term, exceed the average length of a drug approval.

The attached table (Attachment I) shows that the number of days required by FDA to review and approve product submissions in all categories is increasing. The trend is clearly toward lengthening product review times and substantial delays for the public.

What this data cannot convey is the price -- in lives and safety -- that FDA delays exact from patients.

Last year, FDA announced approval of an implantable cardiac defibrillator, nineteen months after the application was filed. This period was added on to the four years the defibrillator was tested under an investigational device exemption. When it was approved, Secretary Heckler estimated that ten to twenty thousand lives could be saved each year by use of the defibrillator. We believe those lives should and could have been saved earlier. We believe that getting a new advance into the market improves public health as much as getting a quack product off.

Other products which also have life saving and life enhancing capabilities are taking much too long to get through the approval process. The Lincoff balloon catheter, a great improvement for eye procedures, took twenty months to get approved. The artificial knee and the artificial hip are devices which enable patients to resume normal lives with their families. The knee took twenty months to approve and the hip took sixteen months.

Even very familiar products like contact lenses can take an extraordinarily long time to be approved. One rigid gas permeable lens, similar to three or four others already being marketed, has been pending in FDA for two and a half years and still has not been approved.

That sums up the problem. But what are the causes and what can be done?

The first area that must be examined is agency efficiency. Our Association is never reticent about identifying opportunities for CDRH to realize efficiencies. Just last year, a task force of our Board studied the product approval process and made recommendations for streamlining it. The recommendations ranged from implementing a document tracking system to making specific regulatory reforms (such as eliminating unneeded legal review of scientific data.) CDRH has acted on several of our recommendations and that, together with the Commissioner's Action Plan and CDRH management initiatives, has led to improvements in the approval process. (Attachment II summarizes the actions that have been taken.)

Steps to increase efficiency are a top priority and should continue. But they alone are not enough.

To cut review periods significantly, we must address the ruthless arithmetic that underlies the device lag: more product applications, plus declining resources, equals longer product reviews.

CDRH's resources simply do not allow it to keep up with its workload. Since 1981, CDRH has lost over 70 full-time equivalents (FTE's). The current workforce for the Office of Device Evaluation is 180 FTE's, and CDRH estimates that on the order of 100 additional FTE's would be needed to cut review times significantly and reduce the PMA backlog. (see Attachment III)

Personnel shifts within the agency cannot realistically produce the 100 FTE's needed. CDRH has already reassigned staff to product approval, and that option is virtually exhausted. To draw personnel from other FDA functions could impede the agency's ability to deal with quack products and public health emergencies.

The Administration's fiscal 1987 budget does not make a serious attempt to address CDRH's resource shortage. It is our understanding that the Administration budget assumes $69.4 million for CDRH, 1.3 percent more than the fiscal 1986 budget. FDA budget documents show that none of this modest increase would go for product approvals.

We are mindful that some agencies are being marked for outright extinction. Nonetheless, the stakes here are high, and the Administration's budget for CDRH is, at best, business as usual.

We propose an additional $5 million in the fiscal 1987 budget for CDRH, to be used for new personnel to do product approvals. This $5 million could pay for about half the 100 some-odd FTE's that CDRH needs to cut review periods and the backlog of applications. If with this money CDRH shows concrete progress, and continues to make efficiency gains, the Committee should consider fiscal 1988 funding for remaining personnel needs.

Our $5 million proposal represents about a 7 percent increase over the Administration's fiscal 1987 budget for CDRH and about a 1 percent increase over FDA's total budget. This proposal is reasonable, and there are good grounds for the Committee to approve it.

Real Issues

When we cut through the review periods and budget figures, the real value of an adequately funded CDRH comes down to things like these:

- Patient Care. It's not video games that are at stake. The issue is the health of patients, and we can't think of anything more important.

- Innovation. It's hard enough to marshal the people, money, and science to develop a product that may not be ready until the next decade. Add the prospect of open-ended delays at FDA, and the appetite of the innovator is less than whetted, especially for the small companies that make up the bulk of our industry. Delays are particularly threatening for device and diagnostics technologies, which, despite long development periods, can change so fast that patent terms are usually irrelevant. Finally, even if everything goes right, innovators face relatively small markets through which to recover their investments.

- Cost-Effectiveness. Health care is making an historic shift towards cost-effectiveness. But technologies can't participate in this revolution if they can't get out of FDA. It makes sense to encourage expeditious review of products like balloon catheters (which saves Medicare about $10,000 for each bypass operation they replace) and new infusion technologies (which allow treatment in low-cost home settings).

- Global Competitiveness. Our industry is one of the few in the manufacturing sector that, overall, has a balance of trade surplus. But we slipped into a deficit with Japan two years ago, and, just last year, into a deficit with West Germany. (Attachment IV summarizes industry trade data.) "There is growing evidence that the United States is falling behind the world in the availability of innovative new products," concluded the President's Commission on Industrial Competitiveness. "[This] is a threat for biotechnology and medical devices." The nation should exploit its competitive strengths, not shoot itself in the foot.

HIMA urges the Committee to approve an additional $5 million appropriation for CDRH product approvals. We offer our assistance to the Committee and its staff on this matter.

ATTACHMENT I

PMA's

(Statutory deadline of 180 days)

Fiscal Year	Days
1982	294 (9.8 mo.)
1983	329 (11.0 mo.)
1984	470 (15.7 mo.)
1985	372 (12.4 mo.)
1986 (3 mo.)	463 (15.4 mo.)

PMA Supplements

1984	140 (4.7 mo.)
1985	240 (8.0 mo.)
1986 (3 mo.)	not available

Investigational Device Exemptions (IDE's)

(Statutory deadline of 30 days)

1984	38
1985	37
1986 (3 mo.)	47

IDE Supplements

1984	45
1985	33
1986 (3 mo.)	150

510k Premarket Notifications

(Statutory deadline of 90 days)

1984	70
1985	76
1986 (3 mo.)	85

ATTACHMENT II

IMPROVEMENTS IN THE PRODUCT APPROVAL PROCESS

Since October 1985, a substantial effort has been undertaken by the Center for Device and Radiological Health to reduce delays in FDA's product approval process for medical devices. These efforts respond not only to recommendations of the HIMA Device and Diagnostic Product Approval Task Force, but also to recommendations of the Center's Criticism Task Forces (internal CDRH groups established to make recommendations to the Center) and the Commissioner's Action Plan. A few of the most significant efforts are described below:

1. Improving the Information Flow. These changes include:
    - Establishing an automated document tracking system for PMAs, 510(k)s, and IDEs.
    - Hiring a consultant to recommend further improvements in information processing.
    - Exploring the possibility of getting outside support from an academic institution to improve information processing.
    - Finalizing plans for a system to permit electronic transmission of summaries of safety and effectiveness data.
2. Making the Ground Rules Clear. These developments include:
    - The receipt of nominations by HIMA for a HIMA fellowship to develop guidelines for PMAs, 510(k)s, and IDEs.
    - Meeting with FDA to discuss plans for the guideline fellowship.
    - HIMA has held several PMA workshops and plans to hold a seminar when FDA publishes its PMA regulation.
3. Building Regulatory Reforms. These developments include:
    - Removal of FDA's Office of General Counsel (with minor exceptions) from the PMA review process.
    - The establishment of a HIMA task force to make recommendations to FDA to streamline the PMA supplement and IDE review processes.

- Office of Device Evaluation (ODE) has instituted a number of reforms, including completion of ODE review before a PMAA is submitted to an advisory review panel and issuance of guidelines for when a supplemental PMA is required to be submitted to an advisory review panel.

- CDRH appears to be seriously considering use of its reclassification authority to reclassify several devices, including stainless steel sutures, magnetic resonance imagers, Yag lasers, automated differential cell counters, and infant radiant warmers.

ATTACHMENT III

FDA BACKLOG*

Fiscal Year	Submission	Decisions	Pending Submissions At End of Year
1982	90	39	70
1983	76	50	81
1984	65	42	73
1985	97	37	103
1986 (5 mo.)	2	30	not yet available

* These figures include only applications which are active at FDA, not those which have been sent back to sponsors for revisions.

ATTACHMENT IV

U.S. Medical Technology's Declining Trade Position, 1983-1985

a. The U.S. device and diagnostics industry lost domestic market share to imports, and historical overall positve trade balance declined because export growth did not keep pace with imports:

	U.S. World Trade 1983 ($M)	U.S. World Trade 1984 ($M)	U.S. World Trade 1985 ($M)	% Change 1984-1985
Exports	2,212	2,296	2,414	5.3
Imports	1,125	1,422	1,741	22.4
Balance	1,087	874	676	-22.0

b. Japan and West Germany were principal competitors, and each increased their balance of trade with the U.S.:

	U.S. Japan Trade 1983 ($M)	U.S. Japan Trade 1984 ($M)	U.S. Japan Trade 1985 ($M)	% Change 1984-1985
Exports	241	263	284	7.9
Imports	232	332	431	29.8
Balance	9	-69	-147	-113.0

	U.S. W.Germ. Trade 1983 ($M)	U.S. W.Germ. Trade 1984 ($M)	U.S. W.Germ. Trade 1985 ($M)	% Change 1984-1985
Exports	177	204	223	9.3
Imports	368	396	512	29.3
Balance	-191	-192	-288	-51.0

WEDNESDAY, APRIL 16, 1986.

PLANT AND ANIMAL QUARANTINE

WITNESS

DEAN E. BUCHINGER, ASSISTANT GENERAL MANAGER, THE IRVINE COMPANY, AGRICULTURE DIVISION, IRVINE, CALIFORNIA

Mr. WHITTEN. Mr. Dean Buchinger will be next.

Mr. BUCHINGER. I am Dean Buchinger, Mr. Chairman. I am presently employed by the Irvine Company as Assistant General Manager. We are a farming company in southern California presently farming about 9,000 acres of irrigated crops.

We have just finished our budgeting process, and I thought we had problems until I sit in on a few of these hearing information.

Plant and animal quarantine programs protecting U.S. agriculture should be of the highest priority during congressional budget considerations, especially in times like this. In January of 1985, I was asked to take part as a representative of the agricultural industry in a fact-finding mission to Central America and Panama to determine the political, social, and economic potential of an eradication of the Mediterranean fruit fly throughout that entire region. Before our investigation, a team of scientists had conducted a study of the area to determine the technical feasibility of such an eradication effort. The results of these missions were that both the programs were possible. The ability to conduct such an eradication program depends on sterile insect technology which has been used successfully in the eradication of animal and plant pests worldwide. The use of baited pesticide sprays to reduce native pest populations to manageable levels and sophisticated means of monitoring the pest populations during the process. Programs like this are very expensive.

Mr. WHITTEN. Mr. Buchinger, you have a very lengthy statement and we are running behind. We will be glad to have the statement appear in the record and you may highlight it, if you would.

Mr. BUCHINGER. Okay. I shall do that. The one thing I wanted to mention, I have made some notes through this, and I will go through there and increase the statement.

In California in '82 and '83, we had a Mediterranean fruit fly eradication program that cost $130 million just for the actual program alone.

Mr. WHITTEN. We are well aware of that.

Mr. BUCHINGER. Yes, I know you are. And we do not know what the cost of the program or of the quarantines resulting from that program were to the industry itself, but they were quite significant.

I visited Guatemala on my own as an interested party to the program as it is being conducted down there, and I can assure you that the program being conducted in Guatemala, with the help of the USDA, is going along quite well.

The concern we have is that if the program is not continued and not moved down through Guatemala into Honduras and into El Salvador and other countries, the people in that area are going to rebel, are going to have a problem, and are going to reject this program that we have invested so much money in. And it is a shame to put so much money into an eradication program that has moved the Med fly out of Mexico into Guatemala, down through the major portion of Guatemala, and then reduce the funding to a point where it stagnates and we have a significant problem and maybe the end of that program.

It is my understanding that the APHIS original budget request had a $20 million figure in there to cover the cost of the movement of that program out of the Guatemala area to the border of Guatemala and Honduras. And it is in this regard that I am testifying.

There are other monies moving into the Central American area through the Caribbean basin initiative through USAID, through programs such as P.L. 480 Title I monies, and I would be in hopes that some of these monies could be redirected so that the funds could be used in the effort to continue this type of eradication effort. And I hope that you would consider that in your hearings.

Mr. WHITTEN. We have got to go to the floor and vote.

Mr. DURBIN. Mr. Chairman, if I could just comment here. I had the opportunity to meet Mr. Buchinger recently in California and to see some of the work they are doing there and to speak to him at length about this problem, and I concur completely. You have made a real convert here, and we will do the very best we can under the tough budget circumstances to try to help you out on a program that is really essential not only for California but for our nation.

Mr. BUCHINGER. Thank you very much.

Mr. WHITTEN. This will have our attention. We have dealt with it before, as you know. You have heard the description of what we are up against. But we got a whole lot of things that we must keep otherwise we will back slide to the point where we were to start with. But we do appreciate your problem. I hate to have to interrupt to go vote, but your statement will have our attention.

Mr. BUCHINGER. That is fine. Thank you for listening.

[The statement of Dean Buchinger follows:]

United Fresh Fruit and
Vegetable Association

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TESTIMONY

OF

UNITED FRESH FRUIT AND VEGETABLE ASSOCIATION

BEFORE THE

SUBCOMMITTEE ON AGRICULTURE, RURAL DEVELOPMENT AND RELATED AGENCIES

OF THE

COMMITTEE ON APPROPRIATIONS

U.S. HOUSE OF REPRESENTATIVES

April 16, 1986

Good afternoon, Mr. Chairman and members of the subcommittee. I am Dean Buchinger, Assistant General Manager, Agricultural Division of The Irvine Company, Irvine, California. I am here today on behalf of the United Fresh Fruit and Vegetable Association (United), Alexandria, Virginia.

United is the largest and oldest national trade association for the fresh fruit and vegetable industry. The 2,500 member companies, including growers/shippers, brokers, wholesalers, retailers and affiliated industries, handle over 80 percent of the fresh produce commercially marketed in the United States.

I would like to address today three programs of primary importance to the fresh produce industry: the Central American Mediterranean Fruit Fly Eradication Program, the Cooperator Program under the Foreign Agricultural Service, and the establishment of an Agricultural Research Service facility in the Far East.

CENTRAL AMERICAN MEDITERRANEAN FRUIT FLY ERADICATION PROGRAM

Medfly is a serious pest and one of the most feared by U.S. growers. The medfly infests many crops of primary importance to the economies of California, Florida, Texas and several other states. Preferred hosts include among others, citrus, peaches, apricots, nectarines, cherries, avocados, apples, pears, plums, and approximately 60 other fruits and vegetables. Medfly destroys the fruit making it unmarketable.

The last major invasion of medfly occurred in California in 1980 and 1981. It cost the United States $300 million in lost production and eradication costs. This cost does not include the millions of dollars lost in export markets which U.S. growers are still trying to regain. The estimated annual loss attributable to an established medfly infestation in California and Florida would cost between $3.2 billion and $4.6 billion. U.S. agriculture simply cannot afford to risk another major invasion.

From 1955 to 1977, the medfly spread through Central America. In 1977, following the spread into Mexico, a cooperative program between the U.S. Department of Agriculture (USDA) and the Ministers of Agriculture from Mexico and Guatemala was organized to prevent further movement throughout Mexico into the United States. This program has been successful beyond expectations.

At the request of the Congress, the Animal and Plant Health Inspection Service (APHIS) and the Food and Agriculture Organization (FAO) of the United Nations prepared a report outlining a technically sound and internationally funded program to establish a barrier at the Darien Gap in Panama. By pushing the current Mexico/Guatemala barrier southward to the Darien Gap in Panama, the risk of infestation is substantially reduced.

It is our understanding that APHIS originally had requested $20 million for the expansion of medfly eradication efforts for fiscal year 1987; however, the Office of Management and Budget deleted all but $8.6 million which is only enough to maintain the current barrier.

Because this would be an internationally funded program, it is important that the United States take the lead while there is still interest among Central American and developed countries alike. The FAO has already spent or committed $750,000 on the initial background work for this program. FAO is ready to call a donors' conference as requested by Secretary John Block to receive firm commitments from other nations. A donors' conference cannot be successful without a firm, up-front commitment from the United States which has been the initiator of the project and will be a major beneficiary. It is our understanding that unofficial interest in supporting this effort both financially and with in-kind contributions has been expressed by a number of developed countries as well.

FAO and APHIS currently are evaluating two implementation programs; one is a nine year program which would cost approximately $350 million; the second is an eight year program which would cost $310 million. The plan in the nine year program is to work southward from the Mexico/Guatemala border to the Darien Gap. Under the eight year program, eradication efforts would work southward as well as northward from the Darien Gap in a pincher effect.

It is time now for the Congress to direct USDA to undertake this program before the United States experiences another devastating medfly invasion. Not only will eradication efforts provide added protection to U.S. crops, but eradication will have a significant beneficial impact on the pest free movement of agriculture crops offseting to some extent the loss of ethylene dibromide, a post harvest fumigant banned for most uses by the Environmental Protection Agency in September 1984.

Even during these times of budget restraint, this effort is certainly a prime example of the maxim, "An ounce of prevention is worth a pound of cure." U.S. agriculture simply cannot afford another medfly infestation in eradication costs, lost production and lost export markets. This is a vitally important program, and one that is ready to move on all fronts. All USDA needs is a commitment from the U.S. Congress to move forward. The medfly directly threatens the American fruit and vegetable industry not just in the future, but now and every year.

COOPERATOR EXPORT PROMOTION PROGRAM

Three decades ago, the Congress created an aggressive foreign market development program for agricultural exports in P.L. 480. A unique public-private cooperative system has evolved since then to develop markets abroad for U.S. agriculture and related industries. The public partner in the system is the Foreign Agricultural Service (FAS) of the U. S. Department of Agriculture

(USDA). The private sector is representated by 60 "cooperator" groups which work to develop markets in 130 countries. Financing from these activities comes about equally from the cooperators, from foreign businesses and government agencies, and from FAS appropriated funds.

Since the purpose of the program is long term market development, it is very important that funding be consistent particularly during these difficult times currently facing U.S. agriculture. Coupled with a $1.6 million reduction in outlays, the proposed fiscal year 1987, 32 percent reduction in funding for this program amounts to a 50 percent reduction in funding. This is not consistent with the emphasis on promoting agricultural exports in the recently approved 1985 Farm bill. A 50 percent funding reduction will not only mean abrupt curtailment of market development activities, but also will force a reduction in representation and staffing in foreign markets. At a time when the export markets show signs of improving, we need to strengthen, not weaken, our efforts.

AGRICULTURAL RESEARCH SERVICE

There is an urgent need on the part of U.S. producers to reduce non-tariff trade barriers which prevent American produce from moving freely, particularly into Asian markets. A major obstacle is the lack of acceptable treatment protocals as well as the lack of inspection for arrival condition of produce.

It is necessary that the Agricultural Research Service (ARS) take aggressive action to support the efforts of the Foreign Agricultural Service and the Animal and Plant Health Inspection Service by conducting research on necessary shipping tests of fresh produce. The development of long term, close personal relationships between USDA research personnel and Asian agricultural regulatory agencies would be the keystone of future progress in opening markets to American fresh fruits and vegetables.

It is our understanding that USDA is committed to pursuing the establishment of a research facility in the Near East. United believes that this vital research would be best conducted through the establishment of an agricultural research center in Yokohama, Japan. This research center is judged by the produce industry to be the most effective single step that the ARS can take to expand trade and help adjust the unfavorable trade balances with several major Asian countries. It would contribute significantly to eliminating unfair trade practices in addition to resolving legitimate concerns of importing countries regarding produce condition, market quality and insect infestation issues. We urge this subcommittee to provide the needed direction to ARS to implement this program.

Thank you Mr. Chairman and members of the subcommittee for this opportunity to comment on these three very important matters. I would be happy to answer any questions you may have.

WEDNESDAY, APRIL 16, 1986.

FEDERAL CROP INSURANCE

WITNESS

PAUL R. FRISKOPP, SHELTON, NEBRASKA

Mrs. **SMITH** (presiding). Our next witness will be Mr. Paul Friskopp, and I want to tell you a little bit about Paul Friskopp. He comes from my congressional district.

He is the President of the Shelton Chamber of Commerce. He is an outstanding young businessman, and I should tell all of you folks that he delivers the crop insurance program very efficiently and very effectively, as did Billy Ray who testified this morning, but Bill Ray does it as a master marketer and Paul does it the other way. And this morning we talked about the two ways of handling this program at the local level, so I am particularly glad, and we all are, that you are here with your testimony, because I can bear witness that you do a highly successful job of it. We are all eager to hear from you.

Mr. **FRISKOPP**. Thank you, Virginia.

The tone of my testimony today is somewhat different from what we have heard, I guess, throughout the day, and that is that I am here to tell you about the accomplishments of a program that you have helped administer and also to give you some ideas of where we can find budgeting savings in the future of this program. So we are talking here about saving money instead of asking for more appropriations of money.

Mrs. **SMITH**. That makes you popular right off, Paul. I will tell you, we do not have very many people come before our Committee who talk about saving money.

Mr. **FRISKOPP**. All right. As Virginia said, my name is Paul Friskopp. I am from Shelton, Nebraska, which is a small rural village in the Platte Valley of central Nebraska. Our area raises irrigated corn with yields of 150 to 165 bushels and soybeans with yields of 50 to 60 bushels. Our area of agriculture consists primarily of row crop production with the main perils of crop failure being hail and the loss of our water supply.

I am representing the Independent Insurance Agents of Nebraska where I have served for ten years on the Farm Committee. I also represent the Independent Insurance Agents of America where I am Vice-Chairman of the Mid-America Conference Farm Committee. I am a member of the American Association of Crop Insurers and I have personally been involved with the marketing of Federal Crop Insurance since 1980 as a direct sales agent with FCIC. And in 1981 I started selling Multi-Peril Crop Insurance through a private company. My general insurance agency services 195 area agribusinessmen with Multi-Peril Crop Insurance, and we are one of the larger agencies selling this coverage in Nebraska.

The Crop Insurance Act of 1980 had certain goals which were accepted as challenges by independent agents, the most significant of which was to improve the participation and widen the homogeneous grouping of farmers interested in protecting themselves from the perils of crop production and the resulting effect of reduced cash flow. As a result, the national participation is two-and-one-half times the volume in 1985 compared to that of 1980. Independent insurance agents such as myself account now for 73 percent of the total volume which now covers 59 million acres of crop production. In Nebraska private agents write 85 percent of the total volume.

The proven yield programs have greatly balanced the inequities of the county average programs and have encouraged the participation of the better producers by providing the risk management protection based on individual experience. As a service to my agribusiness constituents, I have pushed for the easing of documentation in establishing proven yields, and we now have a program based on an equitable value for the premium paid on any producer with basic management records. This accomplishment has not been without cost to myself or the private industry. Removal of the financial support given the ASCS offices for the processing of these records to prove production has this year been absorbed by the agents and private sector.

Service to the producer has been dramatically enhanced by allowing a farmer to write his Multi-Peril Crop Insurance with his local home town agent whom he already trusts with his financial affairs regarding his business and personal insurance needs. Self-reliant agri-businessmen are receptive of a self-help program subsidized by the Federal Government rather than having to ask for a bailout in the form of a disaster program.

Policy information, proving yields, and claiming indemnities are now handled by his trusted insurance counselor rather than an outsiders. In short, broad participation is now based upon sound risk management of individual yields through informed and dedicated private agents and companies.

Present levels of program acceptance are the direct result of the private sales force and the coverage enhancements of the policies. However, as with any ongoing financial management program, there are areas of concern and possible improvement. First, it is time to end the dual marketing system. The private sector now writes 73 percent of the total program and current production will probably raise that figure to over 85 percent. The private sector has proven that it can effectively and equitably handle the program given the supervision of the FCIC in the areas of oversight and re-insurance and other areas of fiscal responsibility. Further, the private sector offers a market outlet for the present master-marketers for the direct sales agents so there will be no gap in coverage now in place. Private companies offer broad coverage for all crops, and contrary to isolated reports of market gaps, can offer coverage to all present crops with the continued aid of the government re-insurance. Now that Federal paper accounts for only one-half of what it did in 1980, it is time to reduce the cost of the FCIC bureaucracy and divert part of that cost to the private sector which accounts for the present success. The cost of maintaining the mastermarketing concept is no longer cost effective.

Second, the present level of Federal Government subsidy is of paramount importance to the overall continued success of the program as financially stressed producers have no way of acquiring replacement funds should the subsidy be removed. Producers have relied on the promise of the subsidy since the removal of the disaster program. If a reduction of the subsidy is deemed prudent, a gradual, fair and scaled reduction would be important to maintain the current levels of program participation.

Third, some sort of longevity and stability needs to be established in the program as producers and agents alike find it difficult to be on top of the latest developments. Actuarially, continual changes create unreliable and distorted statistics. More timely announcements of programs and policy changes would facilitate greater acceptability. For example, I received the new preventative planting endorsement in my office last week. This is a needed coverage, but it was released too late to be implemented this crop season. With all the late announcements this year in the farm program and the requirement of crop insurance by lending institutions, I would call for an extension of the final sales closing date until May 1, 1986. Continuation of the ability to borrow CCC funds is important to assure producers of timely claim payments.

Fourth, with the removal of the dual marketing system and the ASCS proven yield allowance, part of the savings should be diverted to the private sector to compensate those efforts to establish producer yields. The current work load resulting from proving yields has some agents questioning the net return of their efforts.

In conclusion, we are near the goals established by the Crop Insurance Act of 1980. Agri-businessmen across the nation recognize the importance of a self-supporting risk management program marketed through the private sector. Help me as an agent and the farming community as a whole to continue to improve this vital program bringing financial security to the bread basket of our nation.

Mrs. SMITH. Thank you very, very much for that testimony, Paul. That is extremely high class testimony.

Let me tell you that as of last night I had a call from Merritt Sprague saying they had extended the date until April 22nd; not to May 1st, which would probably have been better, but that is better than it was.

Now, you did not happen to mention in your testimony the fact that a very large percent of the people in your area are covered by crop insurance.

Mr. FRISKOPP. Yes, that is true. In Nebraska, of the Federal crop insurance that is written, 85 percent of it is now handled by the private sector. The private sector statistics show that their operating costs are 32 percent of the premium written compared to the FCIC figures of 87 percent. So the private companies are much more effective in handling the business. This is why we feel that eliminating the dual marketing system would free up somewhere in the neighborhood of 50 to 60 million dollars' worth of savings per year by administering the present paper that is issued by FCIC.

Mrs. SMITH. I want to ask one more question. I remember your answer the other night, but I think it ought to be in the record because often it is said to us, well, but private insurers would not go into all our areas. You touched on it, but only very briefly.

Mr. FRISKOPP. Yes.

Mrs. SMITH. Would you just answer it for the record?

Mr. **Friskopp**. Okay. It is my opinion that there was some bad press regarding that. There were some localized companies that had some very localized crop problems, and they withdrew from the market. This would not happen where we have the re-insurance of the Federal Government against the private companies, the larger private companies that work in more than one state. Those were localized situations with small companies.

Mrs. **Smith**. Your testimony was just excellent, and I cannot make other members of the Committee read it, but I will try. I will point out what excellent testimony it is. We have had some very fine statements on crop insurance. This young man came at his own expense 2,000 miles to do this, and we really appreciate that kind of interest and that kind of dedication.

Mr. **Friskopp**. Thank you.

Mrs. **Smith**. And you give Kathy my special greetings.

Mr. **Friskopp**. Okay.

[The statement of Paul Friskopp follows:]

ACCOMPLISHMENTS OF THE 1980 FEDERAL CROP INSURANCE ACT
As Of April 16, 1986

My name is Paul R. Friskopp, from Shelton NE, a small rural village in the Platte Valley in central Nebraska. Our area raises irrigated corn with yields of 150 to 165 bushels, and soybeans with yields of 50 to 60 bushels. Our area agriculture consists primarily of row crop, with our main perils of crop failure being hail damage and the loss of our water supply.

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WEDNESDAY, APRIL 16, 1986.

USDA BUDGET OVERVIEW

WITNESS

GRACE ELLEN RICE, AMERICAN FARM BUREAU FEDERATION

Mrs. SMITH. Now we have Grace Ellen Rice from the American Farm Bureau Federation.

Ms. RICE. Thank you, Mrs. Smith.

I am here today on behalf of the American Farm Bureau Federation, and you are certainly well acquainted with the Farm Bureau.

Mrs. SMITH. Yes, indeed, I am.

Ms. RICE. We are pleased to be here today.

Mrs. SMITH. And very favorably.

Ms. RICE. I will summarize my remarks and ask that the statement be included in the hearing record.

I would like to preface my remarks this afternoon by just a word about Gramm-Rudman-Hollings, which, of course, has been on everyone's mind in the past few months. The Farm Bureau supported Gramm-Rudman-Hollings, and we did so because we believe that is really the best opportunity that we have to regain control of Federal spending. But we also would like to point out what we consider to be a flaw in Gramm-Rudman, which is the exclusion of many different types of entitlement programs from the spending cuts. And this has had the effect of causing a disproportionate share of domestic cuts to fall on USDA. And if I could, for just a moment, point out the '86 cuts and indicate that of the $105 billion in Federal spending which was subject to the cuts, agriculture represented about 28 percent of that sequestrable base. And we eventually wound up with about 22 percent of the domestic cuts. This is significant when you consider that the USDA spending as a whole is probably only around five percent of the total Federal budget.

With regard to the USDA budget, our Board of Directors reviewed the budget at its March board meeting and reaffirmed our commitment to Gramm-Rudman-Hollings budget target, deficit target of $144 billion in 1987, but we believe that that target can be met in ways other than the severe terminations and cuts made in different USDA programs.

We are encouraging an across-the-board spending freeze with the exception of interest payments on the national debt. And we have calculated if you could take the 1986 spending level, which is around $990 billion total Federal spending, and apply it to 1987 projected revenues, which are around $850 billion, you could come up with a total deficit of $130 billion, which is clearly within the Gramm-Rudman-Hollings target and yet meeting the target without having to resort to tax increases.

I'd like to point out that the freeze will be important in areas such as the federal portion of the Extension Service, which had rather severe cuts. Conservation is another such area as well as animal and plant health.

And then finally I would mention two programs in particular that we are interested in: that would be restoring funding for the

FAS, Ag Cooperative Service and also the IR-Four program, which is a program designed to develop a research base for minor use pesticides.

We will support user fees if we believe that the primary benefit accrues to the producer. We think that if consumers also benefit from these programs which have user fees that the costs should be shared also by the consumers.

And, in conclusion, we just want to say that we will work with the Congress to try and develop a budget that meets the deficit target that I mentioned because we recognize that if we do not meet that target, we may find ourselves in worse shape come October 1st if we have automatic spending cuts that go into effect, than we do right now.

Mrs. SMITH. We appreciate this testimony very much. You have made an excellent statement and very well organized, and you have made your points very clearly and concisely. I think that the Congress has a responsibility to come up with a package before the Gramm-Rudman vote ever comes.

You know, we cannot say we will cut the deficit by cutting out 20 percent of the air traffic controllers and 20 percent of the interdiction for drugs and 20 percent off of this and that. We have to set priorities and come up with a package.

I have enough faith in the Congress that I think we will do that. You may know that we have a proposal before the House for an across-the-board freeze, except for interest, which I noted that you suggested. But certainly, this Committee is going to try very hard to come up with an alternate plan that will not result in such heavy cuts in the Agriculture Department, and we agree fully with you that we cannot stand that at the present time.

Ms. RICE. Thank you very much.

Mrs. SMITH. We will do our best.

Ms. RICE. Thank you.

[The statement of Grace Ellen Rice follows:]

THE VOICE OF AGRICULTURE
AMERICAN FARM BUREAU FEDERATION

★ **FARM BUREAU** ★
** the nation's largest general farm organization **

STATEMENT OF THE AMERICAN FARM BUREAU FEDERATION TO THE SUBCOMMITTEE ON AGRICULTURE, RURAL DEVELOPMENT AND RELATED AGENCIES OF THE HOUSE COMMITTEE ON APPROPRIATIONS REGARDING THE FY 1987 U.S. DEPARTMENT OF AGRICULTURE BUDGET

Presented by
Grace Ellen Rice, Associate Director, Washington Office

April 16, 1986

American Farm Bureau Federation
Washington Office — 600 Maryland Ave., SW, Washington, DC 20024. Phone: (202) 484-2222

STATEMENT OF THE AMERICAN FARM BUREAU FEDERATION TO THE SUBCOMMITTEE ON AGRICULTURE, RURAL DEVELOPMENT AND RELATED AGENCIES OF THE HOUSE COMMITTEE ON APPROPRIATIONS REGARDING THE FY 1987 U.S. DEPARTMENT OF AGRICULTURE BUDGET

Presented by
Grace Ellen Rice, Associate Director, Washington Office

April 16, 1986

Mr. Chairman and members of the Subcommittee, Farm Bureau appreciates the opportunity to present testimony on the FY 1987 budget request for the U.S. Department of Agriculture (USDA).

The American Farm Bureau Federation is the nation's largest general farm organization with a membership of over 3.4 million families in 49 states and Puerto Rico. Farm Bureau members produce almost every type of commodity grown commercially in this country. Our policy is developed by the producer members at the county, state and national levels of the organization. The recommendations of Farm Bureau's Commodity Advisory Committees supplement Farm Bureau policy and, in part, form the basis for our position on funding levels for specific USDA programs.

Farmers and ranchers continue to find themselves in serious economic difficulty. Agriculture remains in a severe adjustment period due in part to excess supplies of most farm commodities caused by weakened domestic and world demand and protectionist positions taken by some of our trading partners. Export values continue to decline and are expected to decrease from $31 billion in FY 1985 to $28 billion in FY 1986, down from an all-time high in FY 1981 of $44 billion. Soft domestic and export markets coupled with agricultural credit problems make it incumbent upon Congress to provide adequate USDA funding in 1987 and for USDA to implement the Food Security Act of 1985 to address agriculture's short- and long-term market and income needs.

Overview of Farm Bureau's Budget Policy

Farm Bureau supported the enactment of the Balanced Budget and Emergency Deficit Control Act of 1985 (Gramm-Rudman-Hollings) because it represented the best opportunity to regain control of federal spending. We are committed to meeting its 1987 deficit target of $144 billion through a spending freeze and selected reductions rather than tax increases. At the same time, we urge Congress to correct a major flaw in Gramm-Rudman-Hollings which is its failure to subject all government spending programs, especially entitlements, to spending cuts. The exemption of these so-called uncontrollable programs causes budget cuts to fall disproportionately on discretionary spending areas, many of which are in USDA.

To elaborate on the disproportionate share of spending cuts that certain programs face because of the exemption of major entitlement programs, consider the effects of the FY 1986 Gramm-Rudman-Hollings automatic reductions. Gramm-Rudman-Hollings FY 1986 spending cuts of

$11.7 billion came from $105 billion in domestic spending and $109 billion in defense spending. The cuts, which represented a 4.3 percent reduction in domestic spending and a 4.9 percent reduction in defense spending, were split almost evenly with cuts of approximately $6 billion in each area. USDA spending subject to cuts was $29 billion or almost 28 percent of the sequesterable domestic base. Because certain domestic programs were exempted from any reduction (e.g., Social Security, veterans and railroad retirement), the uniform cuts fell harder on areas such as USDA which were subject to automatic reductions. The 4.3 percent reduction in USDA baseline spending translated into a $1.3 billion cut for agriculture. USDA cuts represented 11 percent of total reductions or approximately 22 percent of domestic cuts. In comparison with the federal budget as a whole, USDA outlays are 6 percent of total federal spending and 8 percent of non-defense spending (U.S. Budget in Brief, FY 1987).

Our attention now has shifted to the FY 1987 budget and how the Gramm-Rudman-Hollings requirements will be met. There is widespread concern that unless Congress and the President enact a budget that meets the deficit target, automatic spending cuts of at least 20 percent will go into effect next fall. This would be disastrous for agriculture, and we encourage the Subcommittee to consider a budget based upon a freeze in total federal spending--no exceptions other than interest on the national debt. Furthermore, all federal programs must be examined for reductions. By freezing federal outlays at the 1986 level of $980 billion and offsetting them with projected 1987 revenues of $850 billion, the resulting deficit of $130 billion would be clearly within the deficit target set by Gramm-Rudman-Hollings. It is significant that the target can be met without tax increases.

FY 1987 USDA Budget Overview

Farm Bureau's concerns about the FY 1987 USDA budget are virtually identical to those expressed in previous years to the Subcommittee. Principally, the allocation of proposed USDA funding is neither equitable nor wise because the Administration's budget request produces significant cuts in or the elimination of many farmer supported programs. Examples of substantial cuts occur in soil conservation, extension, animal and plant health, and animal damage control which was recently transferred from the U.S. Department of Interior to the U.S. Department of Agriculture.

In reviewing the USDA budget at its March meeting, the American Farm Bureau Federation Board of Directors voted to take the following actions with regard to the FY 1987 agricultural budget. Farm Bureau:

(1) Reaffirms its commitment to meeting the deficit target of $144 billion in 1987 through spending reductions. Farm Bureau emphasizes the desperate need to subject all government spending programs, especially entitlements, to spending cuts.

(2) Will work with the Congress through its budget and appropriations process to develop a package of spending cuts that

meets the $144 billion target without the severe cuts and program terminations called for in the President's 1987 budget.

(3) Urges a spending freeze, rather than reductions, in extension, conservation, and Animal and Plant Health Inspection Service activities because they have a direct bearing on production agriculture. It is expected that government agencies with responsibility for these activities will place highest priority on programs relating to the development, production, and marketing of commodities and livestock and the preservation of farmers' soil and water resources.

(4) Opposes the proposal to eliminate conservation cost-sharing in 1987 and rescission of 1986 funds.

(5) Supports the reductions, termination and transfers of programs, such as Farmers Home Administration community development, that have no direct bearing on production agriculture and are low priority items to farmers during this budget crisis.

(6) Supports the proposal to reduce federal funding for administrative/operating expenses for the Federal Crop Insurance Corporation and the premium subsidy.

Farm Bureau policy supports the imposition of user fees if principal benefits of the program accrue to the producer. We oppose the imposition of user fees on producers who are required to comply with federally mandated programs which provide primary benefits to consumers or the general public.

We recognize that there are dozens of USDA programs which deserve individual comment but believe that our support of a government-wide spending freeze best addresses the goal of fiscal responsibility within each program. At a time when agriculture is faced with the allocation of a limited supply of federal dollars, we emphasize that the interests of Farm Bureau members rests with the needs of production agriculture.

During the year of the spending freeze that we are recommending to the Subcommittee, Farm Bureau urges a thorough review of all USDA programs to determine which ones are high priority areas and those with lesser priorities whose goals either have been accomplished or whose usefulness and need have been outlived. This examination will make it possible to reallocate money when agricultural spending emergencies arise.

In conclusion, Farm Bureau urges Congress to adopt a budget and enact appropriations bills that will meet the deficit target of Gramm-Rudman-Hollings. Unless Congress does, USDA programs and farmers and ranchers throughout the country will continue to shoulder an unfair share of spending cuts.

We appreciate the Subcommittee's consideration of our statement and ask that it be made part of the hearing record.

WEDNESDAY, APRIL 16, 1986.

ORPHAN DRUG PROGRAM

WITNESS

ABBEY S. MEYERS, EXECUTIVE DIRECTOR, NATIONAL ORGANIZATION FOR RARE DISORDERS

Mrs. SMITH. Abbey Meyers, is Abbey Meyers here now? Will you come up. We are glad to hear from you. We have done a good deal of discussing and have a lot of interest in the problem of rare disorders, so we will be much interested in your testimony.

Ms. MEYERS. Thank you. I apologize for being late. I flew in from New York.

Mrs. SMITH. That happens. We cannot help it.

Ms. MEYERS. I would like to just summarize my testimony.

Mrs. SMITH. Your complete statement will be in the record.

Ms. MEYERS. Okay. We are very concerned about the Orphan Drug Program at FDA as well as the entire FDA budget. The National Organization for Rare Disorders is a coalition of national voluntary health agencies from all over the country who are concerned about the availability of treatments for rare diseases, and, as you know, this committee, before the Orphan Drug Act was passed, was the first to act on this problem and to appropriate some money to get the program going.

In the years since, almost 100 orphan drugs have been adopted and many more are being developed now. The main problem is the number of drugs that are not adoptable by pharmaceutical companies because they have not been developed enough or there is not enough preliminary evidence to show that they are going to work, and that research is funded by the government under the FDA's Orphan Drug Program. We have never in the three and a half years since the Orphan Drug Act has been passed—the full $4 million for this program has never been appropriated.

This year is particularly critical because over 100 proposals were received by the FDA from scientists who are developing new orphan drugs, and they only had $2.8 million to fund that research.

We understand that Senator Metzenbaum tried to get the Congress to appropriate the full $4 million last year. It was cut back to $3 million during the conference, and then it was reduced by Gramm-Rudman to $2.8 million.

What we are talking about here are the lives of people who either will die without these therapies or will be totally disabled by them. I have given a few examples in my written testimony of disorders that are untreatable now, like autism, where the development of an orphan drug for that disorder shows promise in 25 percent of the people who it has been tried on.

Of those people, 98 percent would be institutionalized as adults; if we could save 25,000 of them and keep them out of institutions, the government would save a huge amount of money and there would be an awful lot of pain saved.

The President, we understand, has asked this year for $5 million for FDA's Orphan Drug Program. An analysis of that amount is that he has asked for $3.5 million for the grant program and $1.5 for FDA's administrative costs. We would like to ask for $5.5 million, which would give FDA the full $4 million that they need to fund this research and $1.5 million.

We would also ask the committee to keep a close eye on the grant program because it was reduced 4.9 percent this year, whereas the rest of the programs were reduced by 4.3 percent under Gramm-Rudman.

Thank you very much.

Mrs. SMITH. Thank you for being here, and I recognize that what you are talking about is a very important and very serious problem, Of course, you know that we are operating under budget constraints as is every committee, but we will certainly do the very best we can.

It concerns me greatly that you have had over 100 proposals brought before you, but you have not had the money to do the adequate research to make those that are good available to the people who need them so much. I am just very proud that our committee was the first to act on this issue because it is extremely important and we appreciate you being here.

Ms. MEYERS. Thank you.

[The statement of Abbey S. Meyers follows:]

National Organization for Rare Disorders Inc.
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Honorary National Chairman
Jack Klugman

Organizational members
American Narcolepsy Association
Amyotrophic Lateral Sclerosis Society
of America
Association for Glycogen Storage Disease
Canadian Neurological Coalition
Chronic Epstein Barr Virus Association
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Paget's Disease Foundation
Parkinson's Disease Foundation
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(PEP•USA)
Prader Willi Syndrome Association
Research Trust for Metabolic
Diseases in Children
Sarcoidosis Family Aid &
Medical Research Foundation
Scleroderma Society, Inc
Tourette Syndrome Association, Inc
United Leukodystrophy Foundation, Inc
United Parkinson Foundation
Wilson's Disease Association
*Associations are joining continuously
For newest listing contact
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J.A. Smith, M.D.

Testimony of the National Organization For Rare Disorders (NORD)

To the House of Representatives
Agriculture, Rural Development, and Related Agencies Subcommittee

April 16, 1986

Regarding FY87 Funding for the
Food and Drug Administrations (FDA)
Orphan Drug Development Program

Presented by: Abbey S. Meyers
Executive Director
National Organization For Rare Disorders

Administration's Request for FY87: $5.0 million

NORD's Request for FY87:	$4.0 million for Research Grants
	$1.5 million for Related Administrative Costs
Total:	$5.5 million for FDA Orphan Drug Program

Dedicated to Helping People with Orphan Diseases

Testimony of
The National Organization For Rare Disorders

Mr. Chairman, Members of the Committee, we are grateful for the opportunity to express our concerns about FY87 appropriations for FDA's Orphan Drug Grant program. As you know, FDA is mandated by the Orphan Drug Act of 1983 (PL97-414) and its ammendments (PL99-91) to establish an Office for Orphan Products Development which oversees development of "drugs of little commercial value" (orphan drugs). These therapies would not otherwise be developed by the pharmaceutical industry because they have little potential for profit.

We are very concerned about implementation of the Orphan Drug Act which authorizes $4 million per year for scientific research **grants** to develop orphan products. The law is 3½ years old. It can be credited with development of several major breakthrough therapies, and yet the full $4 million authorized by the Act has not yet been appropriated. We are here today to urge you to consider the outcry of 20 million Americans with more than 5,000 rare, chronic and debilitating disorders who ask for only $4 million out of America's huge annual budget so that their pain will be alleviated, their lives lengthened and their families will stay intact.

During 1984 and 1985 Senator Howard Metzenbaum asked the Senate to ammend the agriculture appropriation bill so that the full $4 million would be made available to academic scientists studying new treatments and cures for rare diseases. Senator Metzenbaum successfully ammended the FY86 budget and the Senate bill **did** appropriate the full amount. Somehow, when the Bill reached the Conference Committee, the sum was reduced to $3 million, and subsequently the Gramm-Rudman-Hollings legislation reduced that amount by a disproportionate 4.9% (instead of 4.3%). As a result, this year FDA will have only $2.854 million for Orphan Drug Research Grants despite the intense need of millions of

Americans who will suffer and die in the absence of adequate funding.

FDA received 100 letters of intent from researchers seeking FY86 funding. Most of those proposals hold the promise of major medical breakthroughs for untreatable diseases. If all grants could be funded, the total needed would be $10 million. Despite this, the Administration has asked for $3.5 million for FY87 research grants, and $1.5 million for FDA's administrative costs, for a total request of $5 million. No doubt Gramm-Rudman-Hollings will reduce this amount and FDA will be left with hardly $3 million for this sorely needed grant program. Our constituents ask how the Administration can easily find $100 million for Nicaraguan rebels, when it can't find a measly $4 million to save the lives of chronically ill Americans here at home?

Let me tell you just some of the impact of the therapies being developed **now** with Funds you appropriated in previous years:

Autism: At the beginning of this decade 98% of adults with autism were institutionalized. Today, the orphan drug Fenfluramine, is being studied for effectiveness on autistic individuals with funding from FDA's office for Orphan Products Development. Preliminary reports indicate that this drug may be effective in up to 25% of autistic people, allowing them to relate to their environment, interact with other people, and offering hope that at least some people with this hopeless developmental disability may be able to live independent and productive lives outside of institutions. There are approximately 100,000 autistic people in America, and for the first time there is reason to hope that society may not have to pay the costs of insitutionalization (ranging between $80,000 and $100,000 yearly) for perhaps 25,000 of these people. This new hope is directly related to the funds you appropriated in previous years for Orphan Drug Research Grants.

Narcolepsy: This severely disabling neurological disorder, which causes people to suddenly fall asleep without any warning, affects 200,000 Americans. Until now, the only treatments available were habit-forming amphetamines. Under the Orphan Drug Grant Program a new therapy, Gammahydroxybutyrate, known to control narcolepsy for several years in Canada (**without** side affects), is being studied in the U.S.A., with great promise. How many people with narcolepsy will be able to discontinue disability benefits when this drug is approved by the FDA, and how much money will society save (not to mention human suffering) when they become employed?

AIDS: It may be hard to believe as a consequence of all the publicity about AIDS, that this disorder is an orphan disease affecting only 15,000 Americans. There would be no potential for profit to any manufacturer wishing to develop a treatment for AIDS. FDA funded **two** grants from FY86 funding in support of new AIDS treatments. Rock Hudson did not have to go to France; he could have gotten those drugs here!

Other Research funded from your FY86 appropriation include treatments for cystic fibrosis, chronic hepatitis, Charcot-Marie Tooth Disease (presently untreatable), childhood lead poisoning, respiratory distress syndrome in infants, sickle cell anemia, a vaccine for Q Fever (an infectious disease affecting people who work with sheep), and many more. How can our Nation afford **not** to fund this research?

We beg this Committee to appropriate $5.5 million to FDA for its FY87 Orphan Product Development Program. We ask you to specifically state that $4 million of that sum should be **reserved for Research Grant** awards to scientists studying new treatments (drugs, devices and/or biologics) for Orphan Diseases, and $1.5 million should be used for associated administrative costs.

As you consider the very serious fiscal problems affecting our Nation today, please be aware that people with Orphan Diseases are ordinary citizens who have the same concerns about the national debt as you do. We are asking for only $½ million more than the President requested. If we were asking for $100 million dollars or a billion dollars, you would have every reason to consider us just another special interest group. But we ask for so little in comparison to the huge national budget. 100% of every dollar you appropriate for Orphan Drug Research goes directly to the scientists performing these investigations. There are no contractors reaping profits from these grants. Our lives depend upon this tiny budget line item, and future generations of people with hereditary orphan diseases hang in the balance of your Committee reports.

We ask this Committee to appropriate the full $4 million for research authorized by the Orphan Drug Act. We remain keenly aware that literally no orphan drug research would have been performed were it not for this Committee and in particular, Mr. Whitten. We thank you for the lives you've saved and we ask you to give the gift of life to others who rely upon your compassionate response to our needs.

WEDNESDAY, APRIL 16, 1986.

CONSERVATION RESEARCH AND EXTENSION

WITNESS

NORMAN A. BERG, WASHINGTON REPRESENTATIVE, SOIL CONSERVATION SOCIETY OF AMERICA

Mrs. SMITH. Our next witness is Mr. Norman Berg from the Soil Conservation Society. Mr. Berg, your entire statement will appear in the record, and you summarize it as you see fit.

Mr. BERG. Thank you, Mrs. Smith. It is late in the day, and we do appreciate the opportunity to put our views in the record.

Our testimony deals with the agencies in the USDA that carry out the soil and conservation activities at the federal level: the Soil Conservation Service, the Agriculture Conservation Program, and the efforts in research, extension, and credit. And we are recommending to the extent your committee has that latitude and the congress will support your recommendations that these activities be continued in fiscal '87 at the '86 level, if that is at all possible.

As you so well know, resource conservation for over a half century has been viewed as a mutual concern and responsibility with the farmers and ranchers and foresters who own and operate the land to produce our food and fiber and the public through the federal funds and non-federal funds have helped to share the burden of soil and water conservation, including technical assistance, cost sharing, research, and extension.

So we think that this is a good investment. I would like to simply point out that the Food Security Act that became law in late December we feel has strengthened the soil and water conservation efforts that will deal with some of the problems on the non-public lands of the country and should be an additional reason for these agencies being continued at the '86 level in '87.

The additional action that was taken by Congress to assure that these new programs would not be at the expense of additional work is highly commendable, and we appreciate that.

Madam Chairman, your subcommittee and the Congress have to react to some pretty tough decisions in this setting that we have. We are concerned that we continue to be working towards balancing our expenditures with the revenues, and at the same time, that we do not allow our natural resources to further degrade.

Past attempts to abolish some of the conservation programs, such as cost sharing, or to convert the SCS to only a technical assistance staff and terminate thousands of career conservationists was not accepted. A year ago in your report you asked some very pertinent questions, in the report of July 18th, the report 99211, and those are still valid.

Can this country afford to step aside and let the very effective conservation effort that has been built up for the last half a century disintegrate. Can we expect the land users to assume the full cost of protecting and conserving the land for present and future generations when they are facing the problems that they have in terms of income.

We feel, as you have said, that we need to be concerned that we have an effective national conservation effort. We understand that is still the objective of your committee and the Soil Conservation Society appreciates what you have done in the past and will try to do to this extent in the future.

I think we do have a challenge, that as the future unfolds, that our food and fiber production system, that too many take for granted, will not only be sustainable over the long term but will also provide the other values that we get from land that we use primarily for farming, ranching, and forestry. And that starts with the need to conserve and protect and improve the soil.

And, therefore, we think there still needs to be recognition that there are serious problems on the private lands of the country. We have soil erosion that continues to reduce land productivity, impacts off-site water quality and other problems. Groundwater problems are increasingly getting attention.

We have problems of soil compaction and wildlife species that need additional habitat. We need to accelerate the use of conservation practices, including conservation tillage, but at the same time be concerned about what long term use of additional pesticides and herbicides would be doing, and that needs additional research. And we feel that in many cases, although it has not been intentional, farm policy in the past has tended to work against the conservation efforts and has forced land users to cultivate highly erodable soils, eliminate sod crops from their rotations, waste irrigation water, and so forth.

And we feel that there are questions that still need better answers. The agencies that have been in business for these many, many years need support because we need to reconize that land users have to stay in business first, and then what they do on their land and with their water will benefit all of society.

We appreciate very much the time that you give to this work and the support that you give and the fact that you are willing to listen to the statements that you get from the public. Thank you.

Mrs. **Smith**. We thank you very much, Mr. Berg, for coming, and let me also tell you that you could not be in a group of better friends of soil conservation than the people who sit on this committee because we are dedicated to soil conservation. You know, for 29 years the Presidents of this country of both political parties have come in recommending that we cut out the money for soil conservation, and for 28 years this committee has put it back because this committee is very close to the folks at home and we are close to the land and we understand that if you do not invest in the future and protect the land—we could leave our children with all the dollars in the world' but if we did not leave them with good soil that can be productive, they would be poor indeed.

So we will be trying very hard to do the very best we can for soil conservation. And, as you said, we have some tough decisions.

Mr. **Berg**. Thank you very much, and we will help in any way we can.

Mrs. **Smith**. We will count on you.

[The statement of Norman A. Berg follows:].

To advance the science and art of good land use

SOIL CONSERVATION
SOCIETY
OF AMERICA

STATEMENT
of
Norman A. Berg
Washington Representative
Soil Conservation Society of America

before the

House of Representatives
Committee on Appropriations
Subcommittee on Agriculture,Rural Development and
Related Agencies
April 16,1986

Mr. Chairman, Members of the Subcommittee:

I am Norman A. Berg,representing the Soil Conservation Society of America (SCSA). This organization,dedicated to advance the science and art of good land use, and organized in 1945,is international in membership.I am a charter member and fellow,and am proud to have this opportunity to represent the thousands of professional conservationists,who by their work in the field,utilize the resources made available by your Committee.They translate the appropriations authorized by Congress into a myriad of activities that result in soil,water and watershed conservation programs ,for the benefit of all citizens.We appreciate the time you allow SCSA to react to budget proposals,by the Administration for FY'87, for several U.S.D.A. agencies. Our prepared testimony deals primarily with the U.S.D.A.Soil Conservation Service(SCS),the Agricultural Conservation Program(ACP),and other significant efforts such as,research,extension and credit needed to help solve serious soil and water conservation problems.

Resource conservation,for over a half century,has been viewed as a mutual concern and responsibility for all levels of our governmental system.In concert with the farmers,ranchers and foresters,who own and use the land to produce food and fiber, the public has shared the financial burden of soil and water conservation.The challenge we now face is to get the federal expenditures in line with federal revenues,along with making certain that our natural resources are not further degraded. The Administration's proposed 1987 budget,sent to Congress on February 5,1986,contains relatively few surprises for career conservationists and natural resource agencies.As in prior years,the President proposes to make government "leaner" and allegedly more efficient,thereby shaving billions of dollars off the annual federal deficit.This is a continuation of cut-backs of federal government involvement in several domestic areas,as planned and proposed for the last several years.

In the natural resource and conservation area the proposals range from restricting the new construction activities of several agencies to terminating "non-essential" federal work. The President has made clear his strategy: Cut domestic spending,raise military spending,and hold tax revenues steady at the 1985 level.This has been the thrust of the Administration for the past five years.Grammm-Rudman-Hollings is a new pressure mechanism,the law of the land,to force both the U.S.Congress and the Administration to reduce the annual federal deficit to zero over the next five years.It is a sign that the Nation does in fact want to reduce the deficit.To do this you are faced with choices to:(a)cut overall spending significantly,(b)raise revenues,or(c) a combination of both.

Last year SCSA went on record,along with other conservation organizations,testifying,"we too are concerned about the outlook,and that it will take our collective efforts to ensure that conservation programs do not take more than their fair share of cuts as the U.S. struggles to bring federal spending in line with federal revenues".However,we felt that the natural resource and conservation agencies had ,for the past decade,already done their fair share of shrinking.Since 1978 real dollar spending for defense has increased by 50 percent, payments to individuals has risen by 30 percent,and the interest on the federal debt has nearly tripled.These are the increases in funding that have led to the Deficit Reduction Act.During that same period,the Soil Conservation Service has lost about a fourth of their ability,in constant dollars, to perform.Other natural resource and conservation functions experienced similiar reductions in their programs.The proposed budgets for F.Y.1987,would continue this serious slide downward for soil,water and watershed programs.For every federal dollar,defense would get 28 cents,the interest on the debt-15 cents,state and local governments would get 10 cents and the payments to individuals would take 41 cents of every $1. This leaves 6 cents for all other federal activities.U.S.D.A. soil and water conservation program funding is only a blip on the spending curve.Unless all federal programs,including defense and entitlement spending,were subjected to across-the- board reductions,SCSA would defend continuing all U.S.D.A. soil and water conservation activities for FY'87 at the FY'86 level.

Soil Conservation Service:

As one former Chief of SCS,I am disturbed by the continuing efforts of the Administration to shift an undue burden of the soil and water conservation work to nonfederal governments. A major portion of soil conservation is financed by individual farmers,ranchers and foresters,who operate the private lands of the nation.They not only produce the food and fiber for domestic and world-wide needs,they are the custodians and the stewards of the lands and waters for all of society.The long-term benefits of their soil and water conservation work is of concern to all levels of government.Federal funding for every program assigned to SCS shouldn't be a continual controversy.

For FY'86,the Congress did not agree with the Administration that only"Conservation Operations" should be continued. Many had hoped that message would travel through to those who annually go through the ritual of trying to dismantle SCS and all programs they carry out through conservation districts.It will be a challenge to those who administer any future reductions,under the Deficit Reduction Act,to maintain the highest priority work carried out through all the SCS programs.Agency personnel should have that option and flexibilty.Therefore,we would support the Congress in the following recommendations:

Soil Conservation Service (in million dollars)	-FY'86- Approp.	-FY'87- Budget	-SCSA- Recommendation
Conservation Operations	363.3	362.0	363.3
River Basin Surveys	14.8	9.5	14.8
Watershed Planning	8.9	6.5	8.9
Watershed Operations	185.7	66.7	185.7
Emergency Flood Work	45.0	1.1	5.0
Great Plains Cons.Prog.	21.4	-0-	21.4
R.C.& D.	26.2	11.4	26.2
R.A.M.P.	(9.4)	(.8)	(9.4)
Total SCS Funding	$665.9	$457.7	$625.9

Agricultural Stabilization and Conservation Service:

The SCSA has long supported several cost-share programs that provide the general public a way of helping landusers fund the conservation practices that have off-site benefits. Many times in the past this Committee has had to restore the funds needed to maintain this work.Many non-federal governments are adding their resources to help install best management practices to implement water quality and wildlife habitat improvement programs.This is not the time for the federal ACP and other cost-share programs to be terminated.SCSA will help Congress to defend the following recommendations:

ASCS (in million dollars)	-FY'86- Approp.	-FY'87- Budget	-SCSA- Recommendation
ACP	188.9	-0-	188.9
FIP	12.4	-0-	12.4
Water Bank	8.7	-0-	8.7
Total ASCS	$210.0	-0-	$210.0

Agricultural Research Service & Cooperative Research Service:

SCSA would support the federal research proposals as follows:

(in million dollars)	-FY'86- Approp.	-FY'87- Budget	-SCSA- Recommendation
Soil & Water Cons.Res.	$62.0	$62.1	$62.0
Hatch Act	$155.5	$155.5	$155.5
McIntire-Stennis	13.0	13.0	13.0
Rangeland Research	.5	-0-	.5

Extension Service:

The Administration has simply not been realistic in their proposal for the cooperative extension funding.The non-federal governments have been partners in this work for many years.To try and change this approach has generated a storm of protest from throughout the nation.SCSA would support the Committee and the U.S.Congress as follows:

Extension Service (in million dollars)	-FY'86- Approp.	-FY'87- Budget	-SCSA- Recommendation
General Formula Programs	229.7	127.5	229.7
Earmarked Programs	75.3	-0-	75.3
Renewable Resources Ext.	2.5	-0-	2.5

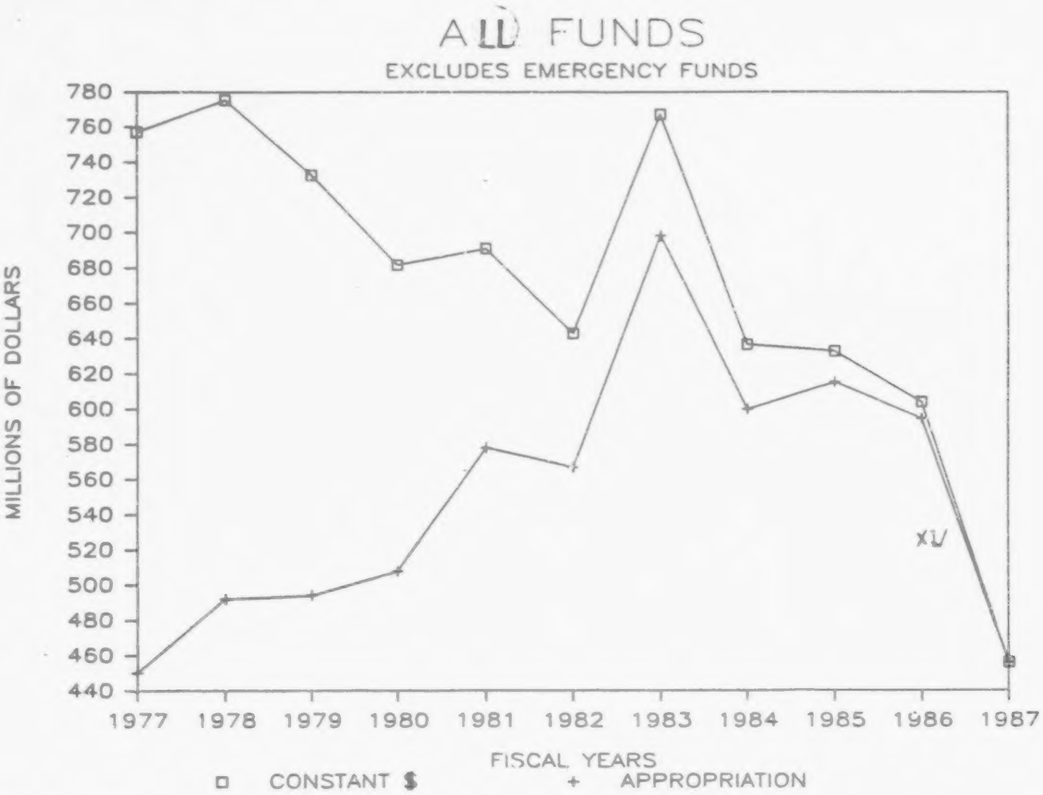
Farmers Home Administration:

The Administration proposes to eliminate the SCS programs that would require credit,such as the Small Watershed and the Resource Conservation and Development Programs.Over the years the federal government has made commitments to assist towns and cities to build flood prevention structures that protect portions of their lands from flooding.In some instances,the structures are built to provide municipal and industrial(M&I) water.Many local entities have secured land rights and are awaiting the SCS to design and provide funds for construction.These are commitments that should be honored. SCSA would,in harmony with the '87 budget items we recommend for SCS,support the funding for FmHA loans as follows:

Farmers Home Administration (in million dollars)	-FY'86- Approp.	-FY'87- Budget	-SCSA- Recommendation
Soil & Water Cons.Loans	28.0	-0-	28.0
Watershed & Flood Prev.	14.0	-0-	14.0
R C & D Loans	2.0	-0-	2.0

Mr. Chairman,the SCSA,as the above recommendations indicate, is in favor of continuing federal funding ,through FY'87,at a a level we think is reasonable.FY'86 new budget(obligation) authority(without supplementals),for all U.S.D.A. programs was about $36 billion.Those interested in the soil,watershed and other resource related work of the Department realize all programs have important constituents.Your task becomes more intense and complex each year.We appreciate the excellent way in which your Committee balances all needs of Agriculture.

The Food Security Act of 1985(P.L.99-198)has strenghtened the soil and water conservation efforts of U.S.D.A.and should add to the rational for FY'87 budgets of the above agencies to be kept at reasonable levels.The additional action taken by the Congress to assure that any new program is not at the expense of traditional work is commendable.Thanks for your support.



Appropriation in: (millions)											
Actual dollars...	$450.2	$492.4	$494.5	$508.1	$578.2	$567.0	$698.3	$599.9	$615.4	$594.6 1/	456.0
Constant dollars.	$757.3	$775.4	$732.6	$681.7	$690.0	$642.9	$767.2	$636.6	$632.7	$603.9	456.0

1/ 1986 estimate would be $534.6 million if the President's Rescission proposal for GPCP ($6.6 million) and WFPO ($54.3 million) are approved.

Mr.Chairman,your sub-committee and the U.S.Congress has had to analyze and react to budget proposals,for many years.The past attempts to abolish the U.S.D.A. conservation programs (such as cost-sharing),or to convert the Soil Conservation Service (SCS) to a technical assistance staff and terminate thousands of career conservationists,was not accepted.Your experience and good judgement said this was not good long-term policy.You asked several pertinent questions in the Report 99-211(7/18/86),that accompanied H.R.3037(FY'86-USDA funding).They are still valid,and need to be asked again:

- -Can this country afford to step aside and let the very effective conservation effort built up over the past 50 years disintegrate?
- -Can we let up on our efforts to prevent the depletion of our soil,water and timber resources at a time when expanding needs for food and fiber at home and abroad are placing increased demands on the productive capacity of this country?
- -Can we expect the farmer to assume the full cost of protecting and conserving the land for present and future generations,when he is unable to even meet the interest payments on his loan?
- -Can we ignore the mistakes of those civilizations which have disappeared or are in the process of disappearing because of failure to protect and preserve their productive resources?

SCSA agrees with you that,"Our people and our government must ever be aware of the need to maintain a strong and coordinated conservation effort.They must realize that the best investment they can make in the future of this country is the conservation of its real wealth-the soil,the water and the timber". As you point out this Committee,with the backing of the Congress,has had to restore severe budget reductions to assure an effective national conservation effort.We understand that is still your objective.SCSA appreciates what you have done in the past and intend to do in the future.

A few weeks ago,I chaired a workshop at a National Forum on Managing Land Use,with the theme of Maintaining the Production,Environmental and Social Values Obtained from Agricultural Land in the U.S.A.The charge to the participants was to address the problem of maintaining the productive capacity of American agriculture while at the same time providing adequately for environmental and other values.In other words how can we best ensure,as the future unfolds,that our food and fiber production system(that too many take for a given) will not only be sustainable over the long-term,but will also provide the other values we get from the land we use primarily for farming,ranching and forestry.Certainly, a basic need is to conserve,protect and improve the soil, the water,the vegetation and prevent any further degradation.

Therefore,as we devote much time to relating budget proposals to the role of the agencies and their programs,we should be concerned about the problems that still await solution.There has been a great deal of progress,but the record should show:

- Clearly, the "farm problem" did not vanish with the export boom of the 1970's. It has become, if anything, more troubled and complex.
- Unstable, inadequate commodity prices and farm incomes, as serious as they are, are by no means the only recurrent problems facing American agriculture. A range of natural resource degradation and environmental problems also persist. USDA conservation agencies are needed because:
- Soil erosion reduces land productivity and contributes to off-site water quality and other problems in nearly every farming area.
- Groundwater is being depleted, and polluted in some regions.
- Irrigated agriculture battles salt accumulations in surface soils.
- Soil compaction, land subsidence and seepage of toxic elements is increasing in significance.
- Wildlife species have experienced serious population declines as more land is devoted to continuous cash-grain rotations and as field borders and wetlands are cleared or drained to expand cropland acreage.
- Technologies to conserve natural resources have tended to be afterthoughts to rapidly evolving production methods designed primarily for short-term profits. Modern farming systems tend to be highly specialized. Often, these systems lack the flexibility to accomodate conservation.
- Many times, conservation tillage is the only feasible way to reduce soil erosion. Yet it's advocates concede that fuel and labor savings are the major motives for its growing use.

Even so, soil erosion reduction may not be realized, unless the crop residue is properly managed and this requires knowledge. There is need for better understanding the long-term impacts of continual reliance on pesticides, particularly herbicides, that characterize most conservation tillage systems. Finally, the Food Security Act of 1985 can, if properly implemented, help correct the past problem of conservation and production policy being pursued separately and quite unequally in the policy realm. It has not been intentional, but in many cases farm policy too often encouraged landusers to cultivate highly erodible soils, eliminate sod crops from their rotations, drain valuable wetlands, waste irrigation water, or apply chemicals above vulnerable acquifers-all to produce corn, wheat, cotton, or other crops frequently in surplus.

The following questions need better answers:

- Why, after 50 years of conservation programs (see attached tables for federal appropriations), is soil erosion still a problem?
- Why are landusers with soil and water conservation problems not adopting or keeping effective conservation systems?

Conservationists have long sought the ultimate technology for soil and water conservation. Now, we increasingly realize that although technology is a necessary condition for conservation it is not a sufficient condition. Now, many professional conservationists have come to realize that government policy, how it is implemented, and human behavior is often as important.

UNITED STATES DEPARTMENT OF AGRICULTURE
Soil Conservation Service
Estimate-Appropriations to the Soil Conservation Service (Excludes Trust Funds)

Fiscal Year	Soil Conservation Research	General Administration	Land Utilization & Retirement Submarginal Land	Conservation Operations	Emergency Erosion Control	Water Conservation & Utilization Projects	Flood Control	Watershed Protection	Watershed Planning	River Basin Surveys and Investigations	Great Plains Conservation Program	Resource Conservation & Development	Appropriated Total All Funds	Presidential Budget Allowance (w)	FY
1935	176,759	—											176,759		1935
1936	187,210	—		483,190									665,400		1936
1937	2,160,830	475,000	1,540,700	22,853,480									27,030,995	27,300,000	1937
1938	1,340,700	675,000	1,667,133	22,175,080									26,057,913	25,000,000	1938
1939	1,310,601	552,050	5,000,000	21,462,349									28,325,000	24,816,000	1939
1940	1,631,185	532,050	1,631,185	21,462,309	75,000								25,331,769	26,645,504	1940
1941	1,300,000	550,090	2,100,000	16,705,750	75,000								20,930,750	20,119,820	1941
1942	1,509,000	510,334	2,752,812	23,316,775	75,000								28,354,521	21,542,826	1942
1943	1,339,429	501,315	1,591,162	20,310,812									23,942,738	23,007,204	1943
1944	1,091,033 (a)	401,315	1,176,120	22,797,180	72,200								25,487,896	25,169,112	1944
1945	1,225,900		1,250,000	28,340,000	72,200								30,887,200	32,372,200	1945
1946	1,963,000		1,087,300	39,300,000	50,300								41,304,000	31,254,300	1946
1947	1,770,000		1,453,000	36,000,000		700,000	2,100,000						42,331,000	46,070,000	1947
1948	1,040,009		1,600,000	38,000,000		1,163,066	3,000,000						44,813,066	40,620,000	1948
1949			1,125,100	46,993,000		1,500,000	6,000,000						55,618,100	49,612,000	1949
1950			1,225,000	51,075,300		—	9,309,000						62,330,300	61,333,000	1950
1951			—	35,465,175		500,000	10,315,000						46,280,175	55,303,600	1951
1952			Comb. w/CO	64,434,991		235,500	4,539,600						71,230,091	63,670,000	1952
1953			—	60,130,000		425,500	7,750,000						68,305,500	68,775,500	1953
1954			—	60,944,010		685,000	7,000,000	5,000,000					73,629,010	67,737,500	1954
1955			Tr. to F.S.	59,085,671		400,000	7,482,000	7,250,000					74,297,671	66,117,000	1955
1956				62,950,000		—	10,000,000	12,000,000					84,950,000	75,396,200	1956
1957				67,500,000		232,000	12,000,000	17,500,000					97,232,000	92,107,000	1957
1958				72,545,000		350,000	13,220,000	25,500,000			10,000,000		121,615,000	132,615,000	1958
1959				74,700,000		335,000	18,080,000	25,500,000			10,000,000		128,615,000	129,615,000	1959
1960				82,322,000		75,000	18,000,000	22,750,000			10,000,000		133,147,000	138,647,000	1960
1961				88,604,000			19,570,000	36,000,000			10,160,000		153,142,000	135,632,000	1961
1962				89,725,000			25,990,000	33,787,000			10,160,000		170,600,000	173,143,000	1962
1963				93,099,710			27,375,850	61,376,350			12,353,550		192,955,460	188,310,000	1963
1964				98,339,000			25,465,000	63,607,000			13,622,000	1,500,000	202,533,000	209,936,000	1964
1965				106,136,000			26,323,000	71,279,000 (b)	6,324,000		14,864,000	1,813,000	226,739,000	204,042,000	1965
1966				108,901,000			25,577,000	66,396,000	5,861,000		16,002,000	4,349,000	227,246,000	221,579,000	1966
1967				109,350,200			25,693,000	70,130,700	6,342,000		18,504,300	4,664,600	234,687,200	228,316,000	1967
1968				114,975,000			25,753,000	70,403,000	6,192,000		16,336,000	6,249,000	239,908,000	240,493,000	1968
1969				118,073,000			24,224,000 (c)	57,990,000 (c)	6,419,000	9,066,000	16,160,000	6,367,000	239,037,000	196,960,000	1969
1970				128,734,000			24,730,000 (d)	66,032,000	6,700,000	8,839,000	15,342,000	10,025,000	260,712,000	230,935,000	1970
1971				139,160,000			21,904,000	70,350,000	6,507,000	9,757,000	16,229,000	14,953,000	278,860,000	267,490,000	1971
1972				155,834,635 (e)			26,620,200	105,411,000	6,700,000	10,091,000	18,113,500	20,067,000	343,245,135	320,905,000	1972
1973				163,940,000			63,874,000 (f)	106,175,300 (g)	7,709,000	11,059,000	18,113,500	26,600,000	397,851,000	337,506,000	1973
1974				167,443,746			46,502,000 (h)	111,339,000	10,596,249	12,371,000	18,253,000	17,217,000	383,221,995	294,563,000	1974
1975				190,007,000			21,445,000	103,082,000	11,099,000	14,531,000	20,196,000	20,320,000	380,680,000	360,529,000	1975
1976				206,007,000 (i)			91,201,000 (j)	120,304,000	11,196,000	14,745,000	22,379,000 (k)	27,972,000	496,044,000	476,650,000	1976
TQ				31,521,000			6,306,000	31,022,000	2,799,000	3,607,000	5,951,000	7,493,000	109,059,000	104,013,000	TQ
1977				223,104,000			37,872,000 (l)	172,467,000	11,651,000	13,362,000	21,639,000	30,679,000	462,514,000	413,536,000	1977
1978				250,360,000 (m)			136,429,000 (n)	133,241,000	12,375,000	16,476,000	22,073,000	31,959,000	602,713,000	569,992,000	1978
1979				262,402,000 (o)			34,460,000 (p)	136,107,000	11,047,000 (o)	16,407,000 (o)	18,609,000	25,441,000	504,473,000	523,247,000	1979
1980				274,670,500 (q)			40,300,000 (p,q)	136,799,000 (q)	11,000,000 (q)	16,441,000 (q)	18,609,000	32,040,000	537,099,000	499,955,000	1980
1981				311,063,000			33,300,000 (p)	139,024,000	10,013,000	10,323,000	20,664,000	34,046,000	558,233,000	490,535,000	1981
1982 (r)				319,099,000			33,041,000 (p)	160,204,000	8,690,000	15,300,000	21,300,000	26,500,000	577,044,000	487,932,000	1982
1983 (s)				335,974,000			60,700,000 (p)	246,725,000	8,077,000	16,419,000	21,315,000	30,744,000	720,754,000	630,645,000	1983
1984				335,095,000 (t)			45,200,000 (p,t)	150,040,000	8,673,000	13,617,000	21,315,000	26,000,000	621,094,000	604,406,000	1984
1985 est.				356,364,000			32,300,000 (u)	150,000,000	8,750,000	14,534,000	21,315,000	26,000,000	609,303,000	475,036,000	1985
1986 est.				358,179,000 (v)			12,093,000 (v)	49,738,000 (v)	3,895,000 (v)	11,374,000 (v)	7,402,000 (v)	10,000,000 (v)	452,681,000	452,681,000	1986
CUM TO DATE	17,246,027	4,217,064	25,149,212	6,297,644,340	423,996	6,603,066	1,131,852,050	2,833,[illegible]	493,917,249	251,801,000	407,435,850	446,558,600	11,646,057,604	10,566,274,094	

(a) Changed from Soil & Moisture Conservation and Land-Use Investigations to Soil Conservation Research FY 1944.
(b) Watershed Planning taken out of Watershed Protection and made a separate appropriation in FY 1965.
(c) River Basin Surveys taken out of Watershed Protection & made a separate appropriation in 1969 & Flood includes $4,300,000 EB.
(d) Includes $4,000,000 for Emergency Measures.
(e) Includes reappropriation of $1,100,635.
(f) Includes Emergency Measures Supplemental appropriations of $36,500,000.
(h) Includes Emergency Measures Supplemental appropriations of $22,500,000.
(i) Includes supplemental of $750,000 for pay act costs.
(j) Includes Emergency Measures Supplemental appropriations of $63,336,000.
(k) Includes supplemental of $2,000,000 for cost share contracts.
(l) Includes Emergency Measures Supplemental appropriation of $12,000,000.
(m) Includes supplemental for Rural Clean Water Program, $2,000,000; Resource Appraisal and Program Development, $3,300,000; and Pay Act Costs of $13,600,000.
(n) Includes Emergency Measures Supplemental appropriation of $100,000,000.
(o) Conservation Operations, Watershed Planning and River Basin Surveys & Investigations were made annual appropriations.
(p) Includes $10,000,000, Emergency Assistance Appropriations.
(q) Includes supplemental appropriation of $7.2 million to CO and 0.5 million to Watershed Planning for pay costs; the $2 million rescission in small watersheds; WF. 08. Returns supplemental funds of $3 million for CO and $20 million for Emergency Watersheds; and a rescission of $277,000 for CO-01, 946,000 for WF-09, $300,000 for EB, and $225,000 for WF-08 for furniture procurement, as finally approved by Congress for FY 1980.
(r) Includes supplemental amounts for pay costs as follows: additional funds--Watershed & Flood Prevention Operations ($2,000,000) and Resource Conservation & Development ($500,000); available by transfer from unobligated Emergency Measure funds--Conservation Operations ($7,099,000), River Basin Surveys and Investigations ($610,000) & Watershed Planning ($755,000).
(s) Includes pay costs supplemental of $10,329,000 as follows: CTA, $8,303,000; RAD, $115,000; Soil Survey, $1,109,000; Snow Surveys, 234,000; PMC, $79,000; RCA, $24,000; River Basin Surveys, $331,000; and Watershed Planning, $282,000. Also includes Jobs Bill Supplemental of $112,300,000 as follows: $5.0 million for RC&D; $7.5 million for Emergencies; $15.0 million for Flood Prevention and $85.0 million for Watershed Protection. Also excludes estimates for SLBC.
(t) Includes pay cost supplemental of $8,138,000 for Conservation Operations as follows: CTA, $6,474,000; RAD, $277,000; Soils, $1,197,000; Snow, $61,000; PMC, $88,000; RCA, $38,000. Also includes EB supplemental of $12,000,000.
(u) Includes $5,000,000 for Emergency Watershed Operations.
(v) FY 1986 Presidential Allowances.
(w) Budget allowance numbers prior to FY 1976 reflect only those amounts provided in the initial Presidential allowance, no supplementals were added to the pre-1976 numbers as a determination could not be made as whether the enacted supplementals were initiated by the SCS or Congress.

SCS:BUD:3-1-85
LDTUS

9/20/85

Agricultural Conservation Program*

1985	$190,000,000
1984	190,000,000
1983	190,000,000
1982	190,000,000
1981	190,000,000
1980	190,000,000
1979	190,000,000
1978	190,000,000
1977	190,000,000
1976	190,000,000
1975	190,000,000
1974	160,000,000
1973	225,500,000
1972	195,500,000
1971	195,500,000
1970	195,500,000
1969	195,500,000
1968	220,000,000
1967	220,000,000
1966	220,000,000
1965	220,000,000
1964	250,000,000
1963	250,000,000
1962	250,000,000
1961	250,000,000
1960	$250,000,000
1959	250,000,000
1958	250,000,000
1957	250,000,000
1956	250,000,000
1955	250,000,000
1954	195,000,000
1953	250,000,000
1952	256,500,000
1951	285,000,000
1950	300,000,000
1949	262,500,000
1948	150,000,000
1947	300,000,000
1946	300,000,000
1945	300,000,000
1944	300,000,000
1943	450,000,000
1942	499,388,671
1941	438,556,740
1940	499,560,000
1939	345,000,000
1938	340,000,000
1937	440,000,000

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* 1977-1985 Direct Appropriation to ACP
1944-1976 Advance Authorization
1937-1943 Appropriations for Conservation and Use of Agricultural Land Resources Which Included the ACP Program.

USDA
Soil and Water Conservation Programs
(Program level in Millions)

	FY				
	85	86		87	88
		Enacted	Proposed		
DIRECT:					
SCS.................	$620	$666	$571	$457	$351
ASCS-cost share.....	219	276	111	--	--
Cons. Reserve.......	--	190	190	550	950
Total Direct........	$839	$1,132	$872	$1,007	$1,301
SUPPORTING:					
Research............	95	96	92	94	94
Extension...........	19	19	18	7	7
Forest Service......	10	12	11	4	4
FmHA Loans..........	13	44	42	--	--
	137	171	163	105	105

1986 Recissions: SCS $67 million ASCS $155 million
Gramm-Rudman SCS $29 million ASCS $ 9 million

WEDNESDAY, APRIL 16, 1986.

FOOD SAFETY AND HEALTH INSPECTION

WITNESS

EDWARD L. MENNING, D.V.M., M.P.H. NATIONAL ASSOCIATION OF FEDERAL VETERINARIANS

Mrs. SMITH. Next is Mr. Mr. Stuart Hardy representing the Chamber of Commerce. Mr. Hardy is not here. Do we have Dr. Edward Menning from the National Association of Federal Veterinarians?

Let me just get in my little plug, Dr. Menning: I am delighted that through this committee we have been able to get $5 million to upgrade; this is money that we budgeted three years ago upgrade our veterinary medical training out in Nebraska where I come from $3 million is going into the Meat Animal Research Center there to upgrade their program and the remainder of it will be to provide large animal training for the students from Nebraska and Kansas.

We will be counting on your help along the way because we are all intensely interested. You know, I come from the beef state. We have 11 head of cattle for every person in my state. So we are much interested in veterinary science.

Dr. MENNING. Thank you very much, Mrs. Smith. I shall also summarize.

Mrs. SMITH. Your whole statement will be put in the record.

Dr. MENNING. The National Association of Federal Veterinarians appreciates this opportunity very much. We realize the budget is tight. However, prevention is best and prevention is less costly in the long run. So being less costly, it could help out-year budgets.

The Gramm-Rudman-Hollings Act has ended up causing various inefficiencies in non-priority acts. The effects of Gramm-Rudman-Hollings have already been devastating to FSIS. There are 127 veterinary medical officer vacancies. There will be 600 inspector vacancies by September 30. A new streamlined poultry inspection system was instituted that reduced inspectors from three down to two, and these two must now inspect birds going past them at 90 birds per minute.

Data shows that hundreds of cancerous and other diseased conditions of these birds are now escaping on each shift of some plants.

Industry and political pressure is, as we speak, lobbying hard to allow increases to the allowance for ingesta and fecal particles on poultry carcasses. Technology of slaughter equipment speed has progressed rapidly over the past 30 years. The technology of preventing contamination from these rapid machines, however, namely in the scalding vats, feather pickers, tearing of intestines, chill tanks, and cutting saws, has not progressed at all; if anything, maybe regressed, resulting in more and more disease organisms being shipped everywhere.

Meanwhile, the public, by and large, remains unaware and uneducated about the proper way they must handle their red meat and poultry if they are to assure safety in their own homes.

According to USDA Economic Research Service data estimates, an average of over 10 people die each day from Salmonella and Camplylobacter in the United States. Of these 10 daily deaths, over three are attributed to beef and chicken. About 10 children, on the average, according to their estimates, are born daily with severe eye and brain damage due to toxoplasmosis, and of these 10, half or five births per day are attributed to pork.

These data do not include anywhere near all diseases in all species of all animals, food animals. A rational, nonhysterical national education program should be implemented. User fees as a method of funding the meat and poultry inspection program should not be allowed.

FSIS should, therefore, be funded at approximately $380 million. Only $1.75 per American per year is quite reasonable to pay for a program evaluating all the beef, pork, chicken, goat, lamb, duck, and geese that are processed, imported, exported, and consumed in the United States. Animal welfare must be strengthened rather than abolished. Animal welfare is obviously needed for the animals' benefit. It, however, is equally necessary for human benefits which result from more reliable research data that evolve from uniformly well cared for and healthy animals.

Unless we wish to revert to the dark ages of animal research, a minimum of $6.8 million should be appropriated. The greatly increased workload brought about by the 1985 Virus-Serum-Toxin Act Amendment plus the advent of logarithmically increasing ibotechnology dicates no user fees and a larger budget for the biologics program.

The safety and efficacy of genetically engineered bacteria and viruses must be properly regulated now, not after some crisis occurs. The potential for human or animal disaser is too real to ignore.

The brucellosis eradication program must be vigorously pursued. This is important from the views of human disease, from animal disease, the economical cost of meat for increased export of meat and animals and critically for the maintenance of an adequate vanguard of veterinary services personnel in APHIS. Brucellosis is eradicatable, just as was hog cholera, though history documents no instance where less than federal entities have coordinated and effectively controlled any multistate disease entity.

We must continue to provide all the services that only the federal government is able to do. We must protect and improve the public's health, our food producing animals' health, and our internal and external export economy. To do these we must have programs funded adequately to, one, prevent entry of disease at ports; two, survey and detect indigenous and exotic diseases that may be in the United States; three, maintain state of the art technical and laboratory services; and, four, respond quickly to disease outbreaks of national importance.

Mr. Chairman, we thank you for allowing our association to address you today, and I would attempt to answer any questions you may have.

Mr. **Akaka**. (assuming chair) Thank you very much, Dr. Menning, for your comprehensive statement dealing with agricultural animals and general veterinary concerns. I have no questions. I thank you very much, and this will certainly be included in the record of the hearing.

Dr. **Menning**. Thank you.

Mr. **Akaka**. Thank you, Doctor.

[The statement of Dr. Edward L. Menning follows:]

STATEMENT

OF

EDWARD L. MENNING, D.V.M., M.P.H.

NATIONAL ASSOCIATION OF FEDERAL VETERINARIANS

BEFORE THE

SUBCOMMITTE ON AGRICULTURE,

RURAL DEVELOPMENT AND RELATED AGENCIES

OF THE

COMMITTEE ON APPROPRIATIONS

HOUSE OF REPRESENTATIVES

APRIL 16, 1986

Witness appearing before the subcommittee:

Edward L. Menning, D.V.M., M.P.H.

Executive Vice President

of the

National Association of Federal Veterinarians

Dr. Menning received his Doctor of Veterinary Medicine from The Ohio State University in 1955 and a Masters in Public Health from the University of Michigan in 1964. He is board certified by the American College of Veterinary Preventive Medicine. He retired from the U.S. Air Force in 1980 as the Assistant Surgeon General for Veterinary Services.

He presently serves as the chief executive officer of NAFV, an association representing about 3000 federally employed veterinarians.

Summary of Request

1. That user fees as a method of funding the Meat and Poultry Inspection Program NOT be approved; rather appropriations of $380 million should be approved.

2. A national education program to inform consumers about safety measures for handling red meat and poultry should be mandated.

3. That FY-87 animal welfare and horse protection funding for the USDA, Animal and Plant Health Inspection Service, Veterinary Services be increased to $6.8 million rather than eliminated.

4. That FY-87 brucellosis eradication for the USDA, Animal and Plant Health Inspection Service, Veterinary Services be maintained at least at the FY-85 level of $73 million.

5. That the FY-87 veterinary biologics funding for the USDA, Animal and Plant Health Inspection Service, Veterinary Services be increased to $9 million appropriations without user fees.

Mr. Chairman, members of the Committee, the National Association of Federal Veterinarians appriciates this opportunity to discuss several specifics of the FY-87 USDA appropriations.

Prevention is best and usually prevention is less costly.

USDA - FOOD SAFETY INSPECTION SERVICE

"Gramm-Rudman-Hollings" Act

The effects of Gramm-Rudmann-Hollings has already been devastating to FSIS.

1) There are now 127 veterinary medical officer vacancies resulting in inadequate supervision of inspectors;

2) There will be 600 inspector vacancies by September 30, 1986;

3) A new streamlined poultry inspection (SIS) was instituted that reduced inspectors from 3 to 2. These two now must inspect birds going past them at 90 birds per minute. Data shows that hundreds of cancerous and other diseased conditions of birds are now escaping inspection on each shift of some plants;

4) The "second" veterinarian on shifts of large poultry plants is being moved to other plants with vacancies;

5) Industry and political pressure is, as we speak, lobbying hard to allow increases to the allowance for ingesta and fecal particles on carcasses;

6) Political pressure was brought to bear to furlough (illegally, we believe) on holidays so plants would not be shut down.

Red Meat/Poultry Foodborne Disease

The following background information is critical to this entire issue of decreasing regulatory control. Technology of slaughter equipment speed has progressed rapidly over the past 30 years. The technology of preventing contamination from these rapid machines (namely in the scalding vats, feather pickers, tearing of intestines, chill tanks and cutting saws) has not progressed at all resulting in more and more disease organisms being shipped every where. Meanwhile, the public by and large remains unaware and uneducated about the proper way they must handle their red meat and poultry if they are to assure their safety in their own homes.

According to USDA Economic Research Service data estimates, an average of over 10 people die each day from Salmonellosis and Campylobacteriosis in the United States. Of these, over 3 per day are attributed to beef and chicken. About 10 children, on average, are estimated to be born daily with severe eye or brain damage due to toxoplasmosis and of these about half or 5 per day are attributed to pork. These data do not include anywhere near all diseases in all species of food animals.

Recommendation - A rational, nonhysterical, national education program should be mandated.

User Fees

User fees as a method of funding the Meat and Poultry Inspection Program should not be allowed.

The purpose of this inspection is for food safety and consumer protection. As such it is and must be mandated by the federal government. It must also be totally controlled by the federal government if it is to be objectively and safely enforced.

Even under the present system, some companies attempt to coerce inspectors, try to have weakened controls and request inspection personnel to be moved when they are perceived as being too strict. Under any type user fee, logic screams out that all of these efforts by companies would become not only more frequent but would probably be more successful.

Meat inspection cannot be uniformly provided by lower government units and certainly cannot be provided by consumers themselves. To give the regulated industry the responsibility for funding is to give them an essence of control. This did not work with poultry inspection in the 1950s. It did not work with meat inspection in 1947. It will not work now.

Recommendation - FSIS should be funded at $380 million. Only $1.75 per American per year is quite reasonable to pay for a good program evaluating all the beef, pork, chicken, goat, lamb, duck and geese that are processed, imported, exported and consumed in the United States.

USDA - ANIMAL AND PLANT HEALTH INSPECTION SERVICE

Animal Welfare

Abolishment of funding for the animal welfare program within the Animal and Plant Health Inspection Service must not be allowed.

Animal walfare must be strengthened rather than abolished. Animal welfare is obviously needed for the animals' benefit. It, however, is equally necessary for human benefits which result from more reliable research data that evolve from uniformly well cared for and healthy animals.

To even consider that humane societies or state or local government agencies could accomplish these tasks is unreal. They do not have the trained people, they do not have the resources, they do not have the objectivity and they do not have the authority.

Recommendation - Unless we wish to revert to the dark ages of animal research, a minimum of $6.8 million should be appropriated.

Biologics

The greatly increased workload brought about by the 1985 Virus-Serum-Toxin Act plus the advent of logarithmically increasing biotechnology dictates no user fees and a larger budget. The safety and efficacy of genetically engineered bacteria and viruses must be properly regulated now not after some crisis occurs. The potential for human or animal disaster is too real to ignore.

Recommendation - The Veterinary Biologics funding should be set at a minimum of $9 million for FY-87.

Brucellosis Program

The brucellosis eradication program must be vigorously pursued. This is important from views of human disease, from animal disease, for economical meat, for increased export of meat and animals, and critically for the maintencance of an adequate vanguard of Veterinary Services personnel.

Outbreaks of highly pathogenic diseases today could be disastrous to our health, wealth and defense. Our country's defense system would be in jeopordy since an army still "travels on its stomach." If foot and mouth (or any others) were introduced in peacetime--immediately all U.S. meat would be prohibited by most of the countries in which we have bases overseas. If it were introduced during mobilization the greatly decreased food production and other complications could be disastrous.

Whether these highly virulent diseases originate in this country (such as the recent avian influenza outbreak) or whether they are exotic and come from overseas (such as foot and mouth disease) is irrelevant. We still need a minimum number of highly qualified Veterinary Services personnel always available to react immediately. We cannot afford the ideal peak buildup number of personnel that will be required to finally control a massive epizootic but we cannot afford to go below the minimum needed for constant vigilance and for immediate onslaught reaction to the potential disease invasion. This minimum number in our opinion cannot be sustained with less than FY-85 Veterinary Services funding for brucellosis since this budget item contains a major amount of their man-years. This required minimum personnel resource is really the overriding issue that must be considered in their budget.

During lulls in epidemics these resources have many other critical disease control objectives which are both health and wealth cost effective. One is brucellosis eradication.

We strongly recommend that the continued goal be to eradicate brucellosis and tuberculosis among other diseases. Such has already been done in eight other major importing countries. Brucellosis is eradicatable just as was hog cholera.

History documents no instance where less than federal entities have coordinated and effectively controlled ANY multistate disease entity. Major federal leadership, technical services, personnel and money have always been required both here and in other countries. Scabies is an example of spread from only Texas in 1970 to ten times that now. States also have a history of taking retaliatory actions even on unrelated products. Allowing control of any national disease to become primarily state or industry managed would be the same as abolishing the program.

The states and the industry are presently carrying a very substantial load (over $70 million reported). This does not count the individual owners' share in testing, vaccination, handling, disease loss, etc. The greatly increased costs they would have to absorb would in essence go toward putting out small fires while the burning forest around them shot sparks everywhere.

Each administration, each Congress and each individual at one time or another have said that prevention is cheaper--prevention is best. Usually, however, funding for preventive measures dramatically falls short.

We must continue to provide all the services that only the federal government is able to do. We must protect and improve the public's health, our food producing animals' health and our internal and external export economy. To do these we must have a program funded adequately to: 1) prevent entry of disease at ports; 2) survey and detect indigenous and exotic diseases; 3) maintain state-of-the-art technical and laboratory services; and 4) respond quickly to disease outbreaks of national importance.

Recommendation - NAFV therefore requests that the Veterinary Services budget of APHIS be funded at the 1985, $73 million level for brucellosis. The safest and most efficient food animal production system on earth can afford no less.

Mr. Chairman, members of the Committee, thank you for allowing the National Association of Federal Veterinarians to present its views. I will now attempt to answer any questions you may have.

WEDNESDAY, APRIL 16, 1986.

FOOD AND DRUG ADMINISTRATION

WITNESS

MITCHELL ZELLER, STAFF ATTORNEY, CENTER FOR SCIENCE IN THE PUBLIC INTEREST

Mr. AKAKA. Mitchell Zeller, Center for Science in the Public Interest.

Mr. ZELLER. Thank you, Mr. Chairman. It's a pleasure to be before the Committee again. With me is Bambi Young, the Director of our environment and behavior project. The Center for Science is a nonprofit, consumer health advocacy organization. Our primary area of expertise is in food and nutrition, and we have about 70,000 members nationwide. The two issues I would like to discuss today are two issues of very great concern to us involving the Food and Drug Administration and the Department of Agriculture. The issues are the hazards of sulfiting agents in the food supply. The second issue is the need for ingredient disclosure of fast food products sold in restaurants.

We know that the committee has had an interest in the sulfite problem; I'd like to briefly update you on events related to sulfites since I last appeared last year. Last summer there were two additional deaths due to sulfites in wine and potatoes. We were very concerned when we got news of these deaths because the Food and Drug Administration has only intended to deal with the presence of sulfites in fresh fruits and vegetables.

Last summer FDA proposed to ban sulfites from fresh fruits and vegetables, but these deaths from wine and potatoes are linked to uses that would be unaffected by FDA's proposed action on fresh fruits and vegetables. FDA's track record on sulfites has been so lacking and so poor that we fear that without intense congressional oversight and the demonstration of Congress's concern, FDA will just fall by the wayside when it comes to responding to the very grave hazards posed by sulfites, which are the only food additive in the food supply linked to known deaths in the last 20 years.

Now, last year Congress proposed a deadline on the Food and Drug Administration to complete its safety evaluation of sulfites by June 1 of this year. We remain concerned that given FDA's track record, that that deadline will not be met. We hope the agency can meet it, but we urge you to stay on top of them because we fear that the deadline will pass without any FDA action.

We've heard a lot about Gramm-Rudman today and given all the diminishing resources around for federal dollars, we believe that the very limited money that is available to FDA would be much better spent protecting the public from the hazards of sulfites than on the much touted health fraud and quackery campaign we hear coming out of FDA where they are going after baldness cures and bust developers. The sulfites are killing people, and it should be a very high priority of the Food and Drug Administration. Unfortunately, it has not been.

The second issue I'd like to discuss is ingredient disclosure of fast foods. Congress has passed a series of statutes that have given the

Food and Drug Administration and the Department of Agriculture the responsibility to make sure that ingredients are disclosed on the labels of foods that are sold in wrappers or containers.

The legislative history of the Food, Drug, and Cosmetic Act going back to the mid-thirties is quite interesting on this score. Even in the thirties, Congress was aware of the problem of food allergies, the sensitivity that consumers might have to individual ingredients in foods, and one of the reasons why Congress passed the mandatory ingredient disclosure provision of the Food, Drug, and Cosmetic Act almost 59 years ago was to protect consumers who were sensitive to specific ingredients in food.

Well, almost 50 years has gone by and we have learned a lot more about hypersensitivity to food ingredients. We have also learned a lot about diet-related disease, such as heart disease and cancer and how those can be linked to ingredients in food.

And FDA and USDA have acknowledged that the federal laws mandating ingredient disclosure do apply to fast foods that are sold in wrappers or containers, yet they are letting that law go unenforced.

Let me give a couple of quick examples of the kind of food allergies we are talking about. There's a color additive known as yellow dye number five, and the FDA specifically requires the disclosure of that color additive on food labels. People who have that sensitivity can suffer headaches, nausea. Some of them can develop breathing problems, and without ingredient disclosure of this color additive, the only way you know to look for it was to look in foods that are yellow.

It turns out that yellow dye number five is in vanilla shakes in some fast food restaurants. You would not know to look for it if it was there. Another example would be people who are intolerant to corn: You might know that corn syrup would turn up as a sweetener in some of the soft drinks, but would you know it is added to the french fires in at least one fast food restaurant. I do not think so.

A third quick example is people who are sensitive to milk solids. You might know to stay away from dessert and dairy products, but would you know to stay away from the fish sandwiches. One of the fast food places that has a fish sandwich puts nonmilk solids in there.

Americans spend close to $50 billion a year on fast food. It makes up a very significant part of the American diet. We have petitioned FDA and USDA for issuance of an enforcement policy that would get ingredients on those labels. USDA denied the petition in December, and FDA has not yet responded to the petition.

We urge the committee to indicate its concern to the agencies because of this vital provision of the federal food laws that are going unenforced. You have delegated to the agencies the responsibility to enforce those provisions of the law, and they are going unenforced by the agency's own admission. And with all of the problems linked to food allergies and diet-related disease, it is vital that Americans who are interested and need this information have it at their disposal prior to making a purchase in a fast food restaurant.

That completes my highlighted testimony. I would be glad to answer any questions.

Mr. **Akaka**. Thank you very much, Mitchell, for your statement. Is she going to testify also?

Mr. **Zeller**. No. Bambi is just here if you have any questions on it.

Mr. **Akaka**. Well, I thank you for the statement, and we will include it in the record. I have no questions. Thank you very much.

[The statement of Mitchell Zeller follows:]

Testimony

Hearing on the Fiscal Year 1987 Appropriations Bill for the Food and Drug Administration

Before the

Committee on Appropriations
Subcommittee on Agriculture,
Rural Development, and Related Agencies

U.S. House of Representatives

* * * * *

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April 16, 1986

Good afternoon. My name is Mitchell Zeller. I am a staff attorney with the Center for Science in the Public Interest. The Center for Science in the Public Interest is a non-profit consumer organization which specializes in food, nutrition and related health matters. CSPI was founded in 1971 and is now supported by approximately 70,000 members.

Today I would like to discuss three regulatory matters pending before the agencies subject to this committee's jurisdiction with which CSPI has been actively involved -- the "GRAS" Review of food additives, the need to disclose the identity of ingredients on fast food labels, and the need for neurotoxicity testing of medications and food additives. We believe our experience with the Food and Drug Administration on the GRAS Review and neurotoxicity testing suggests that a reallocation of budgetary resources together with a reordering of agency priorities is desperately needed. As for the fast food labeling issue, we are greatly concerned that FDA and the Department of Agriculture are not enforcing a key provision of federal labeling laws that Congress has entrusted to the agencies to implement.

1. FDA's Safety Review of Food Additives

Sulfiting agents are a group of food and drug preservatives that have killed at least eight persons and caused many other life-threatening reactions. The eight deaths resulted from reactions to sulfite-treated restaurant food. Since 1970, FDA has been reviewing the safety of all food ingredients, such as sulfites, that were previously considered Generally Recognized As Safe or "GRAS". In July 1982, as part of what is known as the GRAS Review, FDA issued a proposed rule affirming sulfites as safe for use in food.

FDA based its proposal to affirm sulfites as safe on a scientific literature survey completed in 1976. At no time between 1976 and 1982 did anyone at FDA update the literature search. In October, 1982, my organization, the Center for Science in the Public Interest, petitioned FDA to ban or severely restrict the use of sulfiting agents as unsafe. We took this action after discovering numerous studies published between 1976 and 1982 which demonstrated that sulfites pose a life-threatening health hazard to asthmatics and other sensitive individuals.

Since our petition, the deaths of at least eight persons have been closely linked to reactions to sulfite-treated restaurant food. All told, FDA has received reports of more than twenty sulfite-related deaths that are under investigation. Hundreds of other sulfite-sensitive consumers have suffered reactions ranging from mild skin rashes to life-threatening anaphylaxis, coma, and brain damage.

Congress has indicated its concern over FDA's handling of the safety review of sulfites. In the report accompanying the FDA appropriations bill for Fiscal Year 1984 the Senate Appropriations Committee stated it was "concerned about the quality and pace of FDA's safety evaluation of sulfites," and urged FDA to "set aside whatever funds and staff resources are necessary to publish a final rule governing the use of these agents by the end of 1985." S. Rep. 98-160, 98th Cong., 1st Sess., p. 104.

In the report accompanying the Fiscal Year 1985 appropriations bill the Senate Appropriations Committee again expressed concern about FDA's failure to expedite the sulfite safety review. The committee noted that FDA had taken certain actions during Fiscal Year 1984 that made it appear unlikely that the agency could meet the deadline for a final rule established by the committee. S. Rep. 98-566, 98th Cong., 2d Sess., p. 123.

Last year, concerned about continued foot-dragging by FDA, the House of Representatives agreed to a Senate amendment to the FDA Fiscal Year 1986 appropriations bill that requires FDA to complete the safety evaluation of sulfites by June 1, 1986. P.L. 99-190, Section 101(a), referencing H. Conf. Rep. 99-439, Amendment No. 81, 99th Cong., 1st Sess. (1985).

We are greatly concerned about the slowness with which FDA has responded to the grave hazards posed by the use of sulfites in the food supply. Originally, a final rule was expected by the end of 1985. Today, the best that can be hoped for is that FDA will publish a proposed rule by June 1, 1986. Given FDA's poor track record, we have grave doubts about whether FDA will meet Congress' deadline.

To be fair, FDA has issued one proposed rule that addresses part of the sulfite problem. In August, 1985, in response to a mounting death toll and intense pressure from Congress, FDA proposed to ban sulfites from fresh fruits and vegetables. 50 Fed. Reg. 32,830 (August, 14, 1985). That proposal is only a first step. Many other uses of sulfites are capable of causing death and life-threatening reactions. Yet, FDA has failed to take any action that would restrict any other uses of sulfites.

Two recent sulfite deaths demonstrate the need for immediate and stronger action than FDA is contemplating. The deaths were caused by sulfite-treated hash brown potatoes and white wine, uses that are unaffected by FDa's proposal.1/ Given the fact that there are several sulfite-free processed potato products (Ore Ida Tater Tots, Hash Browns, and Golden Patties) and at least one wine (Walthari) that contains no added sulfites, there appear to be no practical reason why a ban on the addition of sulfites to these foods cannot be ordered.

Furthermore, by FDA's own account, less than half of the consumer complaints filed with the agency since 1982 concerned fresh fruits and vegetables. Nearly 30 percent of the cases involved wine, beer, or processed food eaten at home, uses that are unaffected by the proposal to ban sulfites from fresh fruits and vegetables. 50 Fed. Reg. 32,832.

We also note that FDA's proposal fails to address concerns raised by the Federation of American Societies for Experimental Biology (FASEB), which reported on the hazards of sulfites in 1985. FASEB found that the following foods contained "high" levels of sulfites -- wine, shrimp, "instant" potatoes, dried apricots, and "tossed salad."2/ With the exception of tossed salad, none of the foods identified by FASEB as containing high levels of sulfites would be affected by the proposal.

Even a spokesman for the food industry has acknowledged that the majority of the uses of sulfites will continue unabated. Richard E. Cristol, deputy director of the Food Additive Council, stated that the proposed ban on fresh fruits and vegetables "would have very little economic effect...Most of the volume [of sulfites] goes in processed food, such as dried fruit and frozen potato products."3/

We urge this committee to maintain its vigilant watch over FDA. Given FDA's poor track record on sulfites we fear that, without continued prodding from Congress, FDA will fail to respond in a meaningful way to the hazards posed by sulfites.

2. Fast Food Ingredient Labeling

The Federal Food, Drug, and Cosmetic Act requires that all foods regulated by FDA that are sold in wrappers or containers bear ingredient statements on product labels. 21 U.S.C. § 343(i). Similar requirements are contained in the Federal Meat Inspection Act, 21 U.S.C. § 601(n)(9) and the Poultry Products Inspection Act, 21 U.S.C. § 453(h)(9) for meat and poultry products regulated by the U.S. Department of Agriculture (USDA).

With the advent of nationwide chains of franchised fast food restaurants in the 1950s and 1960s, the manner in which much restaurant food is prepared and served has drastically changed. Each of the thousands of fast food establishments is now akin to a small, decentralized food manufacturing facility. The composition of the products is highly standardized; the variety of foods is limited; and most, if not all, foods are served in wrappers that could easily accommodate ingredient information.

In 1979, FDA and USDA concluded that their statutes' mandatory ingredient labeling provisions extend to fast foods that are sold in wrappers or containers. *Food Labeling Background Papers*, p. 13 (1979). However, the agencies decided not to enforce those laws for any restaurant food, though they indicated that they would reexamine this policy in the future if needed. 44 *Fed. Reg.* 76,000 (1979)

Today, with Americans spending nearly $50 billion a year in fast food restaurants, fast foods provide a significant portion of the diets of millions of people. A variety of health problems associated with the ingredients in fast foods makes the disclosure of those ingredients imperative. Hundreds of thousands of Americans are allergic to fast food ingredients such as FD&C Yellow Dye No. 5 and corn-based sweeteners. Many others need to avoid certain ingredients, such as animal fats, and coconut and palm oils, to reduce their risk of heart attack and other diet-related diseases. Ingredient disclosure is the only device that can enable these consumers to safely eat fast foods.

FDA and USDA publicly acknowledged the importance of label disclosure of restaurant ingredients to persons who are allergic to ingredients. In the *Food Labeling Background Papers*, the agencies stated:

> Sufferers of allergies and persons following special diets would benefit from ingredient labeling of restaurant foods ... while the actual impact upon health is rather uncertain, the number of people who may more easily be able to deal with their health problems may be significant.

FLBP, p. 13.

More recently, FDA wrote the Bureau of Alcohol, Tobacco and Firearms (BATF) and urged BATF to require the disclosure of alcoholic beverage ingredients. FDA stated:

> Once sensitivity to ingested substances has been confirmed, however, the most effective way of dealing with the problem is to avoid those substances. *Because many ingredients may be concealed in prepared products, reliance on ingredient declaration may be the only practicable means for consumers to avoid offending substances.*

Memorandum from Joseph P. Hile, FDA Associate Commissioner for Regulatory Affairs, to BATF, July 20, 1983 (emphasis added).

Furthermore, the principle of mandatory ingredient labeling has widespread public support. The Heritage foundation, a conservative think-tank, in its book Mandate For Leadership II, states:

> The mandatory disclosure of certain information may also prove an effective means of achieving regulatory goals. Requiring food processors to disclose the use of certain additives, for example, allows consumers to make a more intelligent choice...

Mandate For Leadership II, The Heritage Foundation (1984), p. 421.

For these reasons, and in particular because of the great concern the public now has over sensitivity to food ingredients and diet-related diseases, CSPI petitioned FDA and USDA last June and urged the agencies to abandon their historical indifference to restaurant ingredient labeling and enforce the labeling provisions of their respective statutes for fast foods served in packaged form. See Attachment 1. Co-petitioners and endorsers included the New York State Consumer Protection Board, the American College of Allergists, and the American Dietetic Association. In addition, thousands of consumers and over 100 health experts have expressed their support for ingredient disclosure to the government. USDA denied the petition in December, 1985. FDA has not yet responded to the petition.

Several members of Congress have expressed concern over the government's failure to enforce this vital provision of federal law. Following the tragic death of a young woman with an allergy to peanuts, who died after she unknowingly consumed peanut butter that was added to a restaurant's chili, Senator John Chafee indicated that ingredient information should be available to restaurant patrons. Congressional Record, March 27, 1986, p. S3756. In addition, after USDA denied the petition, Congressman Stephen Solarz wrote then-Secretary Block and stated that he was "troubled by USDA's denial of the petition." See Attachment 2.

We urge this committee to require FDA to issue a report to the committee within the next several months on the status of the petition. The committee should also express its concern over FDA's and USDA's failure to enforce their statutes' mandatory ingredient disclosure requirements.

3. Neurotoxicity Testing

FDA's mandate to protect the public from unsafe medicines and food products must surely include the responsibility to prevent harm from substances that impair the nervous system and thus disrupt mental function and behavior. Yet the agency to date has made no provisions for screening the chemicals under its jurisdiction to detect any that might cause memory loss, learning disabilities, emotional instability, abnormal activity, coordination problems, or other symptoms of toxicity to the nervous system -- otherwise known as neurotoxicity.

The National Academy of Sciences recognized this gap in FDA policy in a 1984 report called Toxicity Testing. In its conclusions, the Academy recommended that neurotoxicity testing be made a top priority for all medications and food additives, as well as for other classes of chemicals. See Attachment 3. The Academy also provided instructions for conducting appropriate neurotoxicity tests in laboratory animals -- instructions that the EPA's Office of Toxic Substances has translated into a detailed set of guidelines for manufacturers to follow. See Attachment 4.

FDA should adopt similar guidelines for testing the safety of medications and food additives. We are particularly concerned that nothing is being done to detect substances that might interfere with brain development in children exposed before birth or during infancy. Some drugs -- most notably Dilantin -- are already known to cause permanent mental retardation in the offspring of women who take the products during pregnancy. FDA is repeating the mistakes it made in handling the sulfite problem by waiting until victims are irreparably harmed before it takes action against neurotoxic substances. It is time for FDA to implement the National Academy of Sciences' recommendations and require all food additives and drugs to be tested for neurotoxic properties before they are allowed on the market.

We urge the committee to express its concern over FDA's failure to implement the NAS recommendations. The committee should also require FDA to issue a report to the committee within the next several months on the status of the agency's response to the NAS report.

We thank the committee for this opportunity to testify and would be pleased to answer any questions.

NOTES

1. "2 More Deaths Linked to Sulfite in Food Are Under Scrutiny," The New York Times, September 5, 1985, p. 18.

2. Select Committee on GRAS Substances, "The Reexamination of the GRAS Status of Sulfiting Agents," Life Sciences Research Office, Federation of American Societies for Experimental Biology, January 28, 1985, p. 29. *See* 50 *Fed. Reg.* 32,832. These items are by no means the only foods that contain high levels of sulfites. FASEB only used them as examples of foods with high residual levels of sulfites.

3. "U.S. Moves to Ban 6 Preservatives From Fresh Fruits and Vegetables," The New York Times, August 10, 1985, p. 8 [emphasis added].

BEFORE THE
FOOD AND DRUG ADMINISTRATION

Petition for a Statement of)
Enforcement Policy Requiring)
the Disclosure of Ingredients)
on "Fast Food" Labels)

Docket No. ________

CENTER FOR SCIENCE IN THE PUBLIC INTEREST
NEW YORK STATE CONSUMER PROTECTION BOARD
FOOD ALLERGY COMMITTEE, AMERICAN COLLEGE OF ALLERGISTS

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Attachment 1

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June 24, 1985

Dockets Management Branch
Food and Drug Administration
5600 Fishers Lane
Room 4-62
Rockville, Maryland 20857

CITIZEN PETITION

The undersigned submit this petition under Sections 201(k), 201(m), 201(n), 403(a), 403(i), 403(k) of the Food, Drug and Cosmetic Act, 21 U.S.C. § 321 et seq.; Section 4(d) of the Administrative Procedure Act, 5 U.S.C. § 553(e); and Section 10.30 of Title 21 of the Code of Federal Regulations. Petitioners request the Commissioner of the Food and Drug Administration (FDA) to require all foods served in a container or wrapper by "fast food"[1] restaurants to disclose their ingredients pursuant to Section 403(i) of the Food, Drug and Cosmetic Act. All such foods failing to disclose ingredients should be deemed in violation of the Food, Drug and Cosmetic Act's prohibition against misbranded food labels.

INTRODUCTION

The Food, Drug and Cosmetic Act (FD&C Act) requires the disclosure of ingredients on the labels of all non-standardized foods. 21 U.S.C. § 343(i). The Food and Drug Administration

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[1] For purposes of this petition, a "fast food" restaurant is defined as any outlet of a restaurant chain with more than ten franchises that serves foods in a packaged form that satisfies the Food Drug and Cosmetic Act's definition of a "label". 21 U.S.C. § 201(k).

(FDA) has historically chosen not to enforce this provision of the Act against foods served in restaurants, because ingredients could change on an almost daily basis, and no "label," as defined by the FD&C Act, existed for most restaurant foods. 44 Fed. Reg. 76,000 (1979).

With the advent of nationwide chains of franchised fast food restaurants in the 1950s and 1960s, the manner in which much restaurant food is prepared and served has drastically changed. Each of the thousands of fast food establishments is now akin to a small, decentralized food manufacturing facility. The composition of the products is highly standardized; the variety of foods is limited; and most, if not all, foods are served in wrappers that could easily accommodate ingredient information.

FDA has acknowledged this change in the restaurant industry. The agency, in cooperation with the Department of Agriculture and the Federal Trade Commission, undertook a systematic examination of food labeling issues in the late 1970s. That study specifically addressed the ingredient labeling of restaurant food and stated that:

> in the growing number of fast food restaurants, food is generally served in individually-wrapped portions, such as foil-encompassed sandwiches, potatoes in bags, and pies in boxes. In these circumstances, the application of labels, and therefore the requirement of ingredient listing, is a realistic possibility.

Food Labeling Background Papers (FLBP), U.S. Departments of Health, Education, and Welfare, Agriculture, and Federal Trade

Commission (1979), p. 13 (emphasis added).

Today, with Americans spending $40 billion a year in fast food restaurants, fast foods provide a significant portion of the diets of millions of people.[2/] A variety of health problems associated with the ingredients in fast foods makes the disclosure of those ingredients imperative. Hundreds of thousands of Americans are allergic to fast food ingredients such as FD&C Yellow Dye No. 5 and corn-based sweeteners. Many others need to avoid certain ingredients, such as animal fats, and coconut and palm oils, to reduce their risk of heart attack and other diet-related diseases. Ingredient disclosure is the only device that can enable these consumers to safely eat fast foods. Aside from these pressing health concerns, consumers need to know ingredient information in order to avoid economic deception.

In 1979 FDA stated that, while it would not then require the declaration of restaurant food ingredients, it stood ready to reexamine its policy in the future if needed. 44 Fed. Reg. 76,000. For the reasons stated above, and in particular because of the great concern the public now has over sensitivity to food ingredients and diet-related diseases, we petition FDA to abandon its historical indifference to restaurant ingredient labeling and enforce the labeling provisions of the FD&C Act for fast foods served in packaged form.

2/ This figure was provided by Alden Manchester, Senior Economist, National Economics Division, Economic Research Service, U.S. Department of Agriculture.

STATEMENT OF FACTUAL GROUNDS

I. Ingredient Labeling Of Fast Foods Is Warranted For Compelling Health Reasons

A. Consumers who are allergic to specific ingredients rely on ingredient disclosure to avoid products that cause adverse reactions.

Sixty-six million adults believe they have suffered adverse reactions to food. National Consumer Panel of the Market Research Corporation of America (1977). According to the National Institute for Allergy and Infectious Diseases (NIAID), "[a]voidance of specific food allergens is the treatment of choice for food allergy.... Perhaps most important for the highly sensitive patient is the practice of reading food labels." Adverse Reactions to Food, NIAID Report, July, 1984, p. 161. Yet, for the millions of American who are most likely allergic to the ingredients contained in fast foods, avoidance is impossible because fast food labels do not bear ingredient information.

FDA has publicly acknowledged the importance of label disclosure of restaurant ingredients to persons who are allergic to ingredients. In the Food Labeling Background Papers, FDA stated:

> Sufferers of allergies and persons following special diets would benefit from ingredient labeling of restaurant foods... while the actual impact upon health is rather uncertain, the number of people who may more easily be able to deal with their health problems may be significant.

FLBP, p. 13.

More recently, FDA wrote the Bureau of Alcohol, Tobacco and Firearms (BATF) and urged BATF to require the disclosure of alcoholic beverage ingredients. FDA stated:

> Once sensitivity to ingested substances has been confirmed, however, the most effective way of dealing with the problem is to avoid those substances. Because many ingredients may be concealed in prepared products, reliance on ingredient declaration may be the only practicable means for consumers to avoid offending substances.

Memorandum from Joseph P. Hile, FDA Associate Commissioner for Regulatory Affairs, to BATF, July 20, 1983 (emphasis added).

Fast foods served in packaged form contain many of the known allergens found in other food products. For instance, FD&C Yellow Dye No. 5 is used as a color additive in several products. This additive has a clearly identifiable population of sensitive individuals who can only avoid the dye by reading food labels. In fact, FDA requires the specific label disclosure of Yellow Dye No. 5 to alert consumers who are allergic to this additive. 21 CFR § 74.705(d). In its memorandum to BATF, cited earlier, FDA specifically mentioned the need to disclose Yellow Dye No. 5. It said, "that there is enough reason for concern about possible adverse reactions to FD&C Yellow No. 5 to require its specific identification on the labels of all foods in which it is used." Supra.

Other ingredients used in fast foods that cause allergic reactions include:

* Corn-based Sweeteners - Many of the soft drinks, dessert items, and sauces served in fast-food establishments contain

corn-based sweeteners that can trigger allergic reactions in the thousands of Americans who are sensitive to corn and corn derivatives. One expert maintains that corn is the most significant food allergen. Randolph, T.G., Food Allergy, Med. Clin. North Am. 1948; 32:245-263.

* Milk Solids - The dessert items and shakes so popular in fast-food establishments contain milk solids. Since it is possible for some of these products to be composed entirely of non-milk ingredients it is essential that the ingredients of these products be disclosed so that allergic consumers can purchase products that do not contain milk.

Other examples of allergens contained in products that may be sold by fast-food restaurants include sulfiting agents used to preserve salad ingredients and processed potatoes. At least 500,000 persons are allergic to sulfiting agents and risk suffering life-threatening reactions. Other examples include eggs, wheat, and peanuts.

B. Ingredient labeling is needed to aid persons who must avoid certain ingredients linked to diet-related diseases.

A variety of health problems, in addition to allergies, are linked to many ingredients used in fast foods. In some cases, the federal government has urged some or all Americans to avoid or moderate their intake of these substances.[3/] Yet, without full disclosure of these ingredients on fast food labels,

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[3/] Dietary Guidelines for Americans, U.S. Departments of Agriculture, and Health and Human Services (1980).

consumers have no means of avoiding these ingredients when consuming fast foods. The following ingredients are representative of this category:

* Fats - A diet high in saturated fat promotes atherosclerosis, which increases the risks of heart attack and stroke. These diseases claim the lives of more than 700,000 Americans each year -- considerably more than any other major illness. The Departments of Agriculture and Health and Human Services, along with the American Heart Association and other medical authorities, have urged the general public to moderate their intake of saturated fats. Persons seeking to follow this potentially lifesaving advice would clearly be aided by labels that disclose the specific type of fat used to prepare individual fast food items.

Various types of fats are found in fast foods. Many people may mistakenly assume that fast foods are fried in polyunsaturated oil because home-cooked fried foods are usually prepared in that manner. However, many fast food establishments prepare food by using lard, beef tallow, or other highly saturated fats. Current FDA regulations require each individual fat type -- be it animal, vegetable or marine; hydrogenated or partially hydrogenated -- to be disclosed on food labels. 21 C.F.R. § 101.4(b)(14). This regulation needs to be enforced for fast food products so that consumers can avoid foods that are prepared with highly saturated fats.

* Saccharin - Diet soft drinks offered for sale in fast food restaurants may be sweetened in whole, or in part, with

saccharin, a known animal carcinogen. Consumers who are concerned about the health risks of saccharin must be able to identify products that do, and do not, contain this sweetener. The FD&C Act currently requires a warning notice on the label of all saccharin-sweetened foods. 21 U.S.C. § 343(o). While restaurants are exempted from the saccharin warning notice by FDA, the exemption should not apply to fast food establishments where foods are served in packaged form and can be easily labeled.

* Aspartame - Phenylketonurics must avoid the amino acid phenylalanine, which is found in all foods that contain the sweetener aspartame. In fact, FDA requires the labels of all foods sweetened with aspartame to contain the warning statement "Phenylketonurics: Contains Phenylalanine." 21 CFR § 172.804(e). Nevertheless, diet soft drinks served by fast food restaurants in sealed paper or plastic cups do not disclose this information. Other individuals have reported extreme sensitivities to aspartame and need to know which products contain the sweetener in order to avoid it.

* Color Additives - Numerous artificial coloring agents are added to fast foods, such as milk shakes, ice cream, pastries, and soft drinks. There are varying amounts of evidence that several of the dyes, including Red No. 3, Blue No. 2, Green No. 3, and Yellow No.6, increase the risk of cancer. FDA has recently recommended that action be taken against Red No. 3 because of its potential carcinogenicity. It is essential that the simple label declaration noting the presence of artificial

coloring be extended to fast food products.

* BHA and BHT - These preservatives, known chemically as butylated hydroxyanisole and butylated hydroxytoluene, are used as antioxidants in many foods containing fats or oils. Some studies suggest that they promote cancer, and further research is being conducted. In the meantime, consumers who want to avoid these chemicals must know which products do and do not contain them.

* MSG - Monosodium glutamate (MSG) is added to meat-based fast foods. In sensitive individuals, MSG causes headaches, muscle tightness, and tiredness, symptoms that have been dubbed "Chinese Restaurant Syndrome." Many restaurant patrons who have experienced this uncomfortable ailment seek to avoid MSG-containing fast foods.

The health considerations just described provide compelling grounds for the issuance of an enforcement policy to require ingredient labeling on fast foods.

II. The Failure to Disclose Fast Food Ingredients Constitutes Economic Deception to Consumers.

Consumers have a basic right to know the ingredients in fast foods. The failure to disclose fast food ingredients leaves consumers completely in the dark as to the composition of these products. In order to avoid being deceived by products which the public might otherwise believe to be naturally flavored, naturally colored, or additive-free, consumers must be provided with ingredients on the labels of fast-food products.

A variety of artificial ingredients is used in fast foods. For example, shakes and dessert items, which the public may believe to be composed of milk, eggs, natural flavoring, and real sugar, may contain artificial colorings, flavorings, emulsifiers and thickening agents. Without ingredient labeling, consumers have no way of knowing the actual composition of these products.

FDA has long believed that ingredient disclosure is a basic consumer protection device. FDA has stated that ingredient labeling

> facilitate[s] 'value comparisons,' the basis of FDA's ingredient declaration requirements for cosmetics under the Fair Packaging and Labeling Act (21 CFR 701.3). Indeed, it has been the agency's experience that...most [consumers] want enough information to be able to make value comparisons, even if only to favor certain ingredients or avoid others.

Memorandum to BATF, supra., p. 1.

Furthermore, the principle of mandatory ingredient labeling has widespread public support. The Heritage Foundation, a conservative think-tank, in its book Mandate For Leadership II, states:

> The mandatory disclosure of certain information may also prove an effective means of achieving regulatory goals. Requiring food processors to disclose the use of certain additives, for example, allows consumers to make a more intelligent choice...

Mandate For Leadership II, The Heritage Foundation (1984), p. 421.

To prevent this economic deception from being perpetuated, FDA should issue a statement of enforcement policy that requires fast food ingredients to be disclosed on product labels.

STATEMENT OF LEGAL GROUNDS

III. FDA Has Jurisdiction Over The Labeling Of Restaurant Food

Any doubt over whether FDA has jurisdiction over fast food labels was resolved when FDA stated in the Food Labeling Background Papers that "present legal authority would be adequate to extend ingredient labeling to those restaurant foods that come in 'containers' or that have 'wrappers'." FLBP, p. 14.

FDA clearly has the power to take action against fast food products that are misbranded, as long as they have entered interstate commerce or are held for sale after shipment in interstate commerce. See 21 U.S.C. § 301(a)-(c), (k).

Fast foods that are served in packaged form satisfy the FD&C Act's definition of what constitutes a "label." The wrappers or containers in which fast foods are served invariably contain "a display of written, printed, or graphic matter upon the immediate container" of the fast food item. 21 U.S.C. § 321(k). The definitional section of the statute goes on to say that any information required to appear on a label must appear on the outside container or wrapper of the retail package. Id.

FDA stated in 1979 that the primary authority over restaurants resided with state and local governments. 44 Fed. Reg. 76,000 (1979). Even if these other governmental entities have the necessary personnel to inspect restaurants, the fact remains that many fast food restaurants are part of large regional or national chains. To insure uniform ingredient disclosure, they must be regulated by the federal government, rather than on a piecemeal state-by-state basis.

Furthermore, in the six years since FDA stated that the responsibility for insuring the disclosure of this vital health information falls to state and local governments, not one of these governmental bodies, to our knowledge, has used its authority to require ingredient disclosure.

The absence of ingredient information from the labels of fast food products represents a crystal clear violation of the FD&C Act. FDA has the jurisdiction to issue a statement of enforcement policy requiring the label disclosure of fast food ingredients. The disclosure of this information is an important enough public health matter to justify the active enforcement of the agency's labeling authority over fast food restaurants.

IV. Fast Foods Sold In Packaged Form That Fail To Disclose Their Ingredients Are Misbranded Under The Food, Drug And Cosmetic Act.

A. The Failure to Disclose Ingredients Violates the FD&C Act's Mandatory Ingredient Labeling Provision.

Non-standardized foods, such as the products sold in fast-food restaurants, are required by the FD&C Act to disclose their ingredients on the product label. Section 403(i) clearly states that the failure to list ingredients renders the product misbranded.[4] Since the wrappers or containers that fast foods are served in satisfy the FD&C Act's definition of a label, any fast food label that does not bear ingredient information is misbranded.[5]

"[M]isbranding was one of the chief evils Congress sought to stop" when it enacted amendments to the FD&C Act that, inter alia, required mandatory ingredient labeling. 62 Cases of Jam v. United States, 340 U.S. 593, 596 (1951). The Act is a remedial statute designed "to protect consumers who under present conditions are largely unable to protect themselves in this field." Kordel v. United States, 335 U.S. 345, 349 (1948). Mandatory ingredient labeling is one device created by the FD&C Act that enables consumers "to protect themselves" by providing vital information at the point of purchase so that consumers can avoid particular products whose ingredients may adversely affect their health. See also, United States v. Aangamik 15 Calcium Pangamate, 503 F. Supp. 925 (N.D. Il. 1980), aff'd, 678 F.2d 735 (7th Cir. 1982); United States v. Kocmond, 220 F.2d 370, 373 (7th Cir. 1952) ("the statutory requirement is that at the time the merchandise reaches the ultimate consumer it shall be so labeled as to indicate its true contents.")

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[4] The statute states that "[a] food shall be deemed to be misbranded -

(i) If it is not subject to the provisions of subsection (g) of this section unless its label bears...(2) in case it is fabricated from two or more ingredients, the common or usual name of each such ingredient." 21 U.S.C. § 343(i).

[5] Processed packaged foods sold in supermarkets or grocery stores are similar to fast foods to the extent that both are required to disclose non-standardized ingredients on product labels. However, in a supermarket, consumers can review the ingredients of processed packaged foods prior to making a purchase and thereby avoid foods that contain ingredients they choose not to consume. Most fast food establishments are not designed to allow consumers to examine product containers prior to purchase. This reduces the utility of an ingredient statement were it only to appear on a product label. Therefore, FDA should encourage the fast food industry to voluntarily display an ingredient list of all products either on wall posters, table placards, or via some other equally effective way. This will put the fast food consumer on an equal footing with the consumer in a supermarket who can peruse an ingredient list prior to making a purchase.

The legislative history of the FD&C Act demonstrates that Congress viewed mandatory ingredient labeling as a device to aid consumers who are allergic to food ingredients. In 1935, the Senate passed S. 5, the forerunner of the FD&C Act enacted by Congress in 1938. In the report accompaning S. 5, the Senate stated that mandatory ingredient labeling:

> has a distinct public-health significance. A surprisingly large proportion of our people are made ill - some violently so - by common ingredients in food which most people consume with impunity. That large group of unfortunates can protect themselves from the consumption of foods to which they are allergic by the information made available to them under...this section.

S. Rep. 361, 74th Cong., 1st Sess., p. 12 (1935).

Furthermore, Section 403(k) of the FD&C Act specifically requires food labels to disclose artificial flavors and colors, and chemical preservatives. Fast food products contain a wide variety of additives, yet fail to disclose their presence on product labels. Given the great concern over the possible adverse health effects of additives, especially to allergic consumers, this violation of the FD&C Act's misbranding provision is of particular concern. See, United States v. An Article of Food, 550 F. Supp. 15 (W.D. Ok. 1982) (a food label that failed to disclose chemical preservatives, in view of increasing concern about chemical additives in food, may reduce value of article; consumer can only get information needed to make informed choice from product labels required by the Act.)[6]

B. The Failure To Disclose Ingredients On Fast Food Labels Is Misleading.

Fast food products that fail to disclose ingredient information also violate the FD&C Act's prohibition against misleading labeling. Any food label that fails to reveal material facts about the consequences of the use of a product is misbranded. 21 U.S.C. § 321(n).

Fast food labels that do not bear ingredient information are misleading because consumers have no way to distinguish between low quality products that contain artificial additives and products that are additive-free. A "vanilla shake", for example, may contain natural vanilla flavoring and real milk, or it may contain artificial vanilla flavoring and a non-dairy milk substitute. Thus, the consequences that follow from the failure of fast food products to bear ingredient information is that a consumer may unknowingly purchase a product that contains inferior, or undesirable ingredients.

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[6] The FD&C Act does provide for exemptions from the ingredient labeling requirements of Sections 403(i) and (k) to be granted through the promulgation of regulations. See 21 C.F.R. § 101.100. However, no specific exemption has ever been granted for the labels of fast food products.

The label disclosure of ingredient information is vital to an informed purchasing decision. The omission of such information renders such fast food labels misbranded. *See* *Cosmetic, Toiletry and Fragrance Association v. Schmidt*, 409 F. Supp. 57 (D.D.C. 1976), *aff'd* *without* *opinion*, No. 75-1715 (D.C. Cir. Aug. 19, 1977); *Council for Responsible Nutrition v. Goyan*, C.A. No. 80-1124 (D.D.C. August 1, 1980); *Pharmaceutical Manufacturers Association v. FDA*, 484 F. Supp. 1179 (D. Del. 1980), *aff'd*, 634 F.2d 106 (3rd Cir. 1980).

In order to correct the consumer deception from unlabeled fast food products, we urge FDA to require that the ingredients of such products be disclosed.

V. Conclusion

For the foregoing reasons, Petitioners urge the Commissioner of the Food and Drug Administration to issue a statement of enforcement policy to require the disclosure of "fast food" ingredients on product labels.

ENVIRONMENTAL IMPACT

The action requested in this petition has no significant environmental impact.

CERTIFICATION

The undersigned certify, that, to the best knowledge and belief of the undersigned, this petition includes all information and views on which the petition relies, and that it includes representative data and information known to the petitioner which are unfavorable to the petition.

Respectfully submitted,

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February 7, 1986

The Honorable John Block
Secretary, U.S. Department of Agriculture
Washington, D.C. 20250

Dear Secretary Block:

I am writing to express my interest in ingredient labeling of fast foods. I understand that on December 3, 1985, USDA rejected a petition filed by the Center for Science in the Public Interest, the New York State Consumer Protection Board, and the American College of Allergists, urging USDA to enforce its madatory ingredient disclosure laws for foods sold in fast food restaurants.

I am particularly interested in the reasons offered by USDA for rejecting the petition. I would greatly appreciate your prompt response to the following questions:

(1) What are the "regulation reform policies" with which the petition was deemed to be "incompatible"?

(2) Does the Department have any actual cost data to support the conclusion that labeling costs "would be substantial"?

(3) Do the Federal Meat and Federal Poultry Products Inspection Acts require that "compelling public benefits" must be proven to outweigh the cost of a proposal in order for regulatory action to be taken?

(4) Does USDA still agree with its 1979 interpretation that "present legal authority would be adequate to extend ingredient labeling to those restaurant foods that come in 'containers or wrappers'"?

I am troubled by USDA's denial of the petition. Not only does fast food ingredient labeling make eminent good sense from a public health standpoint, but it appears to be required by the very statutes Congress has entrusted the Department to enforce.

I look forward to your responses to my inquiry. Please direct these to my Legislative Assistant, Alex Wohl.

Sincerely,

STEPHEN J. SOLARZ
Member of Congress

SJS:aw

Attachment 2

THIS STATIONERY PRINTED ON PAPER MADE WITH RECYCLED FIBERS

Toxicity Testing

Strategies to Determine Needs and Priorities

Steering Committee on Identification of Toxic and Potentially Toxic Chemicals for Consideration by the National Toxicology Program

Board on Toxicology and Environmental Health Hazards

Commission on Life Sciences

National Research Council

NATIONAL ACADEMY PRESS
Washington, D.C. 1984

Attachment 3

TABLE 19 Relative Comparison of Testing Need by Intended-Use Category of Select Universe[a]

Category and Subsample Size			
Pesticides and Inert Ingredients of Pesticide Formulations (15)	Cosmetic Ingredients (15)	Drugs and Excipients in Drug Formulations (15)	Food Additives (15)
Neurobehavioral toxicity	Neurobehavioral toxicity	Acute inhalation toxicity	Acute inhalation toxicity--nonrodent
Teratology--rodent, rabbit	Subchronic eye toxicity	Skin sensitization--guinea pig	
			Subchronic oral toxicity--nonrodent: 90-d study
Genetic toxicity		Subchronic dermal toxicity: 90-d	
	Subchronic dermal toxicity: 90-d		Subchronic oral toxicity--nonrodent: 6- to 12-mo study
		Subchronic inhalation toxicity: 14- or 28-d	
Subchronic inhalation toxicity: 14- or 28-d	Skin painting--chronic		
	Skin penetration	Subchronic inhalation toxicity: 90-d	Neurobehavioral toxicity
Multigeneration reproduction--rodent	Skin sensitization--guinea pig		Multigeneration reproduction--rodent
		Multigeneration reproduction--rodent	
Carcinogenicity--rodent	Subchronic dermal toxicity: 21- or 28-d		Combined chronic toxicity-carcinogenicity--rodent
Combined chronic toxicity-carcinogenicity--rodent		Carcinogenicity--rodent	
	Genetic toxicity	Genetic toxicity	Genetic toxicity
Acute delayed neurotoxicity		Subchronic eye toxicity	
		Segment I: fertility and reproductive performance	
	Human sensitization		Subchronic oral toxicity--rodent: 90-d study
Subchronic dermal toxicity: 21- or 28-d		Acute delayed neurotoxicity	
		Skin painting--chronic	Teratology--rodent, rabbit
	Acute eye irritation--corrosivity	Implantation	
			Carcinogenicity--rodent
	Carcinogenicity--rodent		

Skin sensitization--guinea pig
Toxicokinetics
Chronic toxicity

Acute inhalation toxicity

Acute eye irritation--corrosivity
Subchronic oral toxicity--rodent: 90-d

Subchronic oral toxicity--nonrodent: 90-d

Acute dermal toxicity

Acute dermal toxicity
Acute dermal irritation--corrosivity

Acute dermal toxicity
Subchronic toxicity nonrodent: 14- or 28-d
Subchronic oral toxicity--nonrodent: 90-d
Subchronic oral toxicity--nonrodent: 6- to 12-mo
Neurobehavioral toxicity
Teratology--rodent, rabbit
Chronic toxicity
Combined chronic toxicity-carcinogenicity--rodent
Segment III: perinatal and postnatal performance

Acute oral toxicity--nonrodent
Acute dermal irritation--corrosivity
Acute eye irritation--corrosivity
Subchronic oral toxicity--rodent: 90-d
Human sensitization
Acute oral toxicity--rodent
Acute parenteral toxicity
Subchronic oral toxicity--rodent: 14- or 28-d

Subchronic oral toxicity--rodent: 14- or 28-d
Toxicokinetics

Acute oral toxicity--rodent

APPENDIX I

REFERENCE PROTOCOL GUIDELINES FOR NEUROBEHAVIORAL-TOXICITY TESTS

Neurobehavioral-toxicity testing requires both morphologic and behavioral assessment. With current methods, the effects of some chemicals are most reliably detected by measuring morphologic changes, whereas other chemicals produce behavioral changes without, as yet, the identification of any morphologic basis. Because methods for neurobehavioral-toxicity testing are still being developed and validated, a high degree of standardization in such testing is inappropriate at this time. Nevertheless, a scheme proposed by a committee of the National Research Council (1977) gave specific and detailed suggestions of protocols for neurobehavioral-toxicity testing. The scheme, presented here, is a reasonable starting point for neurobehavioral-toxicity testing, and the suggested protocols were used as the reference protocol guideline in this study.

The 1977 committee recommended that both conditioned and unconditioned behaviors be studied. For unconditioned behavior, it suggested that circadian patterns of spontaneous motor activity (SMA)* be measured. SMA in rodents has been widely studied to document behavioral changes produced by chemicals.

This procedure does not require any special training of personnel. For conditioned behavior, it suggested that performance maintained by schedules of food presentation be used as a measure. Some types of schedule-controlled responding** require little training of the animal, but provide an estimate of the effects of a substance on fairly complex behavioral processes. Reiter et al. (1981) have found that measurements of SMA and schedule-controlled behavior are two of the most sensitive tests for determining the behavioral effects of pesticides. A battery of sophisticated techniques for more detailed evaluation of substances for neurobehavioral effects is gradually being developed (Geller *et al.*, 1979).

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* Spontaneous motor activity (SMA) is a measurement of an animal's body movement under a given set of environmental conditions. SMA may be detected by a variety of techniques, including photocell-beam interruption and changes in a capacitance field. It is important that measurements be objective and unbiased. Use of automatic instrumentation is recommended for the measurement of SMA.

** Schedule-controlled responding is maintained by reinforcement. For example, animals are trained to make specific responses to specific stimuli to obtain food or water or to avoid shock. The relationship of the response to delivery of such reinforcers is called the schedule of reinforcement, and the behavior may be referred to as schedule-controlled responding (Ferster and Skinner, 1957).

Measurement of morphologic changes in the nervous system requires in situ perfusion of the animal and the use of contemporary methods of nervous system preparation for examination by light microscopy and perhaps electron microscopy. Spencer *et al.* (1980) have developed procedures for tissue preparation based on glutaraldehyde fixation that permit classification of neurotoxins according to their target sites (e.g., soma and myelin). Their system permits assessment of the location, type, and degree of neurotoxic damage. For the neurotoxins studied thus far, there is a good correlation between the type of neurotoxic damage observed in animal models and the type of neurotoxic damage produced by the same substances in humans.

In addition to the behavioral and morphologic testing recommended for the screening of neurotoxins, a host of other approaches to neurotoxicity testing are under development. Among these are tests involving tissue cultures, electrophysiology, and neurochemistry. The current stage of development of some of these approaches has been outlined briefly by Spencer *et al.* (1980).

PRINCIPLES AND DESCRIPTION OF TESTING FOR NEUROBEHAVIORAL EFFECTS

Many substances damage the nervous system (Spencer and Schaumburg, 1980) and thereby produce a variety of behavioral changes. Although no substance or series of substances can now be recommended as a reference for neurotoxicity testing, positive controls are always desirable. Agents with established neurobehavioral toxicity should be tested repeatedly to establish the sensitivity of the measurement system when new substances with potential neurobehavioral toxicity are under investigation.

A range of doses of a substance should be administered for acute-toxicity testing of neurobehavioral effects, including doses large enough to produce obvious effects. Fractions of the LD_{50} should be used, and the substances should be administered by the route of likely human exposure. Effects of the substances on SMA and schedule-controlled behavior should then be determined. Later, the animals should be sacrificed for histologic examination by light microscopy and possibly electron microscopy. For subchronic studies, three doses, including the highest dose that did not affect behavior or produce morphologic changes on acute administration, should be administered repeatedly.

Healthy adult animals should be randomly assigned to treatment and control groups. In some instances, behavior is exceedingly stable, and pre-exposure behavior provides control observations for the exposure period. Rats are the preferred animal, although mice are also appropriate. Standard breeds and strains should be used, and at least six animals should be studied at each dose.

SMA must be measured under carefully controlled conditions (National Research Council, 1977). For example, strain of animal, feeding and watering schedules, time of day of testing, and conditions of temperature, humidity, and lighting must be specified. The device used to measure SMA must also be described in detail, although no particular method has yet been recommended.

For measurement of schedule-controlled responding, conditions must also be specified in detail. Again, the species, body weight, feeding and watering schedules, etc., must be specified. The reinforcement schedule should be described in sufficient detail to allow others to repeat the experiment under nearly identical conditions.

A reasonable time should be allowed to elapse, after the substance is administered, for absorption and distribution before behavior is measured. Animals should be tested daily for at least 1 wk after acute administration to determine the consequences of delayed neurotoxicity, such as that observed with alkyl tin compounds. Similar principles should be followed for subchronic testing. Where possible, it is desirable to have histologic examinations and behavioral testing of the same animals.

Additional animals exposed to the substance, but not tested for behavioral effects, can be added to the design as necessary to increase group size for time-response effects. Methods similar to those described by Spencer *et al.* (1980) are appropriate.

Tests of statistical significance should be applied to the data. Reproductions of histologic slides can often be used to illustrate types of neurotoxicity, although tables are generally necessary to document the frequency with which the illustrated events occurred. Specificity of neurobehavioral toxicity may be expressed as the ratio of the LD_{50} to the neurobehaviorally toxic dose. Neurobehavioral-toxicity evaluation and its relative importance should include a comparison with other toxicity data on the substance. For example, neurotoxic effects manifested only by a dose 10 times higher than that required for carcinogenicity would be of little regulatory interest.

The test report should include dose-effect data for behavior and morphology, a description of the location and type of neural lesions, the time course of the development of behavioral and morphologic changes, statistical treatment of the results, and an indication of the degree to which the toxicity is reversible.

Detection of either morphologic changes or behavioral changes caused by effects on the central nervous system can be considered as evidence of neurobehavioral toxicity that may be extrapolated to humans. The degree to which such extrapolation is valid is under investigation. More sophisticated understanding of specific types of behavioral toxicity would require a series of tests that is beyond the present protocol. When morphologic changes have been observed, the selection of later behavioral tests should be strongly influenced by the type, degree, and location of the morphologic changes.

DETERMINATION OF ADEQUACY OF NEUROBEHAVIORAL-TOXICITY TESTING

Because no reference protocol guidelines for neurobehavioral-toxicity testing have been established and because much evidence of neurobehavioral toxicity exists in qualitative descriptions of the adverse effects of substances, the Committee on Toxicity Data Elements has established a series of criteria for judging the adequacy of neurobehavioral-toxicity testing, including observations of effects.

The neurobehavioral-toxicity data base (see Figure I-1) should contain studies on function (both conditioned and unconditioned behavior) and morphology (neuropathology). The committee regarded neurobehavioral-toxicity testing to be (1) adequate, according to reference protocol guidelines, only if all three study types followed the procedures described here; (2) adequate, but not according to reference protocol guidelines, if all three study types were conducted adequately, but not according to the procedures described here; and (3) inadequate if at least one of the three study types was missing or was conducted inadequately. The need to repeat studies conducted inadequately depends on the amount and quality of existing neurobehavioral-toxicity information on a substance. For example, documentation of extensive neural lesions (a morphologic response) might make behavioral testing (a functional response) unnecessary for regulatory purposes, because the neuropathologic effects already constitute a hazard. These criteria allowed the committee to determine whether neurobehavioral effects were observed with adequate or inadequate procedures.

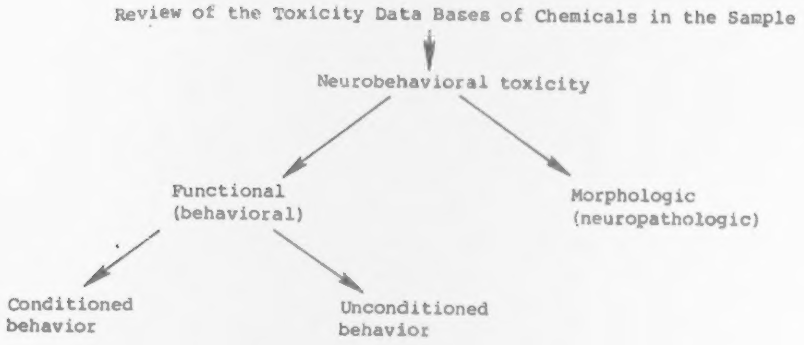
Review of the Toxicity Data Bases of Chemicals in the Sample
Neurobehavioral toxicity
Functional (behavioral)
Morphologic (neuropathologic)
Conditioned behavior
Unconditioned behavior

FIGURE I-1 Studies necessary for judging adequacy of neurobehavioral-toxicity testing.

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federal register

Friday
September 27, 1985

Part II

Environmental Protection Agency

40 CFR Parts 796, 797, and 798
Toxic Substances Control Act Test Guidelines; Final Rules

Attachment 4

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Parts 796, 797, and 798

FRL 28[illegible]–1

[OPTS–[illegible]]

Toxic Substances Control Act Test Guidelines

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: This rule introduces Parts 796, 797, and 798 which consist of Toxic Substances Control Act (TSCA) test guidelines. These guidelines were previously prepared for publication by EPA. Elsewhere in this issue of the **Federal Register** certain test guidelines, which have been published as Organization for Economic Cooperation and Development (OECD) Guidelines for the Testing of Chemicals are also codified as additional TSCA test guidelines.

EFFECTIVE DATE: Effective on September 27, 1985.

FOR FURTHER INFORMATION CONTACT: Edward A. Klein, Director, TSCA Assistance Office (TS–799), Office of Toxic Substances, Rm. E–543, 401 M St., SW., Washington, D.C. 20460. Toll free: (800–424–9065). In Washington, D.C.: (554–1404). Outside the USA: (Operator–202–554–1404).

SUPPLEMENTARY INFORMATION: This final rule codifies TSCA test guidelines which were previously prepared for publication by EPA. Elsewhere in this issue of the **Federal Register**, certain test guidelines which have been published by OECD are also codified as TSCA test guidelines.

Section 4(b)(1) of the Toxic Substances Control Act (TSCA) specifies that test rules shall include standards for the development of test data. This action codifies guidelines which may be used to establish test standards in future TSCA section 4 test rules.

These guidelines, which are now introduced into Parts 796 (chemical fate), 797 (environmental effects), and 798 (health effects) of 40 CFR, have been previously published or prepared for publication by EPA. These guidelines present generally formulated procedures for laboratory testing of an effect or characteristic deemed important for the evaluation of health and environmental hazards of a chemical. The TSCA guidelines have been rigorously peer reviewed prior to publication. Most of these guidelines have also been offered for public comment (44 FR 27334, May 9, 1979; 44 FR 44054, July 26, 1979; 45 FR 75753, November 21, 1980; 47 FR 13013, March 26, 1982). The Agency reviews and updates its TSCA test guidelines once a year according to the process described in the **Federal Register** of September 22, 1982 (47 FR 41857).

The Agency had originally planned to incorporate by reference the pertinent TSCA guidelines into the chemical specific test rules. However, under the provisions of 1 CFR Part 51, material generated by a particular government agency is not usually acceptable for incorporation by reference unless the material meets certain criteria set forth in 1 CFR 51.7 (a) and (b). Because the Director of the Federal Register has rejected the OTS request for permission to incorporate by reference the TSCA guidelines, the Agency finds it necessary to codify these guidelines into the Code of Federal Regulations with no substantive changes. This codification will make chemical-specific rules under Part 799 more usable and understandable. It is expected that modification of existing guidelines and addition of new guidelines will occur later as the state-of-the-art evolves or the need for them warrants. Elsewhere in this issue of the **Federal Register** certain OECD guidelines are also codified into the TSCA test guidelines.

Codification of these guidelines does not impose any regulatory obligation on any person who may be subject to a TSCA section 4 test rule. Specific guidelines will not become mandatory test standards until they are promulgated as such in individual section 4 rulemakings. When promulgated in such test rules, the pertinent TSCA guidelines will become test standards for only that particular section 4 rule and will not serve as generic test standards. EPA may propose modifications to the various guidelines as they are utilized for chemical-specific test rules. In each chemical-specific rule, the proposed test standards and any modifications will be subject to public comment.

List of Subjects in 40 CFR Parts 796, 797, and 798

Testing, Environmental protection, Chemical fate, Environmental effects, Health effects, Chemicals.

Dated: September 23, 1985.

John A. Moore

Assistant Administrator for Pesticides and Toxic Substances.

Therefore, 40 CFR Chapter I is amended by adding new Parts 796, 797, and 798 to read as follows:

PART 796—CHEMICAL FATE TESTING GUIDELINES

Subpart A—[Reserved]

Subpart B—Physical and Chemical Properties

Sec.
796.1550 Partition Coefficient (n-Octanol/Water).
796.1570 Partition Coefficient (n-Octanol/Water)-Estimation by Liquid Chromatography.
796.1720 Octanol/Water Partition Coefficient, Generator Column Method.
796.1840 Water Solubility.
796.1860 Water Solubility (Generator Column Method).
796.1950 Vapor Pressure.

Subpart C—Transport Processes

796.2700 Soil Thin Layer Chromatography.
796.2750 Sediment and Soil Adsorption Isotherm.

Subpart D—Transformation Processes

796.3100 Anaerobic Aquatic Biodegradation.
796.3140 Anaerobic Biodegradability of organic chemicals.
796.3500 Hydrolysis as a function of pH at 25 °C.
796.3700 Photolysis in Aqueous Solution in Sunlight.
796.3780 Laboratory Determination of the Direct Photolysis Reaction Quantum Yield in Aqueous Solution and Sunlight Photolysis.
796.3800 Gas Phase Absorption Spectra and Photolysis.

Authority: 15 U.S.C. 2603.

Subpart A—[Reserved]

Subpart B—Physical and Chemical Properties

§ 796.1550 Partition Coefficient (n-Octanol/Water).

(a) *Introduction*—(1) *Background and purpose.* (i) Bioconcentration, the accumulation of a substance in living tissues or other organic matter as a result of net chemical uptake from the medium (e.g., water), is a factor in determining the movement of a chemical in the environment and the potential effects of the chemical on biota. Hydrophobic chemicals that are present in the aqueous environment at subtoxic concentrations may accumulate to toxic levels once inside organisms, presumably through diffusion into nonpolar cell components, where they accumulate because of their greater solubility. Further movement of the substance in living tissues may occur as a result of ingestion of lower trophic level organisms, i.e., food chain effects.

(ii) The tendency of an organic chemical to bioconcentrate in living cells can be inferred from the value of the octanol/water partition coefficient are then allowed to lay eggs and F_1 males are collected for test mating.

(2) *F_1 mating.* F_1 males should be bred with virgin females of the parental female stock. Since each F_1 male represents one treated gamete of the male parent. the F_1 males have to be mated individually to virgin females. Each F_1 male should be mated to three females to ensure sufficient progeny.

(3) *Scoring the F_2 generation.* F_2 cultures (each representing 1 F_1 male tested) should be scored for the presence or absence of phenotype variations (linkage of markers) from the expected types. The test should be designed with a predetermined sensitivity and power. The number of flies in each group should reflect these defined parameters. The spontaneous mutant frequency observed in the appropriate control group will strongly influence the number of treated chromosomes that must be analyzed to detect substances which show mutation rates close to those of the controls. A positive test should be confirmed by F_3 mating trials.

(4) *Number of replicate experiments.* Replicate experiments are usually performed for each dose of the compound tested. If a chemical is a potent inducer of translocations. one experiment may be sufficient. Otherwise two or three replicate experiments should be done.

(f) *Data and report*—(1) *Treatment of results.* Data should be tabulated to show the number of translocations and the number of fertile F_1 males at each exposure for each germ cell stage sampled.

(2) *Statistical evaluation.* Data should be evaluated by appropriate statistical methods.

(3) *Interpretation of results.* (i) There are several criteria for determining a positive result. one of which is a statistically significant dose-related increase in the number of heritable translocations. Another criterion may be based upon detection of a reproducible and statistically significant positive response for at least one of the test points.

(ii) A test substance which does not produce either a statistically significant dose-related increase in the number of heritable translocations or a statistically significant and reproducible positive response at any one of the test points is considered nonmutagenic in this system.

(iii) Both biological and statistical significance should be considered together in the evaluation.

(4) *Test evaluation.* (i) Positive results in the heritable translocation test in *Drosophila* indicate that under the test conditions the test substance causes chromosome damage in germ cells of this insect.

(ii) Negative results indicate that under the test conditions the test substance does not cause chromosomal damage in *D. melanogaster.*

(5) *Test report.* In addition to the reporting recommendations as specified under 40 CFR Part 792. Subpart J. the following specific information should be reported:

(i) *Drosophila* stock used in the assay, age of insects. number of males treated. number of F_2 cultures established. number of replicate experiments.

(ii) Test chemical vehicle. treatment and mating schedule. exposure levels. toxicity data. dose and route of exposure.

(iii) Positive and negative (vehicle) controls.

(iv) Historical control data. if available.

(v) Number of chromosomes scored.

(vi) Criteria for scoring mutant chromosomes.

(vii) Dose-response relationship. if applicable.

(g) *References.* For additional background information on this test guideline the following references should be consulted:

(1) Wurgler. F.E.. Sobels. F.H.. Vogel. E. "*Drosophila* as assay system for detecting genetic changes." *Handbook of mutagenicity test procedures.* Eds. Kilby. B.J.. Legator. M.. Nichols. W.. Ramel. C. (Amsterdam: Elsevier/North Holland Biomedical Press. 1979) pp. 335–374.

(2) [Reserved]

Subpart G—Neurotoxicity

§ 798.60[illegible]0 Functional observational battery.

(a) *Purpose.* In the assessment and evaluation of the potential human health effects of substances. it may be necessary to test for neurotoxic effects. Substances that have been observed to cause neurotoxic signs (e.g.. convulsions. tremors. ataxia) in other toxicity tests. as well as those having a structural similarity to known neurotoxicants. should be evaluated for neurotoxicity. The functional observational battery is a noninvasive procedure designed to detect gross functional deficits in young adults resulting from exposure to chemicals and to better quantify neurotoxic effects detected in other studies. This battery of tests is not intended to provide a detailed evaluation of neurotoxicity. It is designed to be used in conjunction with neuropathologic evaluation and/or general toxicity testing. Additional functional tests may be necessary to assess completely the neurotoxic potential of a chemical.

(b) *Definitions.* (1) Neurotoxicity is any adverse effect on the structure or function of the central and/or peripher nervous system related to exposure to chemical substance.

(2) A toxic effect is an adverse chang in the structure or function of an experimental animal as a result of exposure to a chemical substance.

(c) *Principle of the test method.* The material is administered by an appropriate route to laboratory rodents The animals are observed under carefully standardized conditions with sufficient frequency to ensure the detection of behavioral and/or neurologic abnormalities. if present. Various functions that could be affected by neurotoxicants are assessed during each observation period.

(d) *Test procedures*—(1) *Animal selection*—(i) *Species and strain.* The laboratory rat or mouse is recommended. Although information will generally be lacking. whenever possible the choice of species should take into consideration such factors as the comparative metabolism of the chemical and species sensitivity to the toxic effects of the test substance. as evidenced by the results of other studies. The potential for combined studies should also be considered. Standard strains should be used.

(ii) *Age.* Young adult animals (at least 42 days old for the rat or mouse) should be used.

(iii) *Sex.* (A) Equal numbers of animals of each sex are required for each dose level.

(B) The females should be nulliparous and nonpregnant.

(2) *Number of animals.* All exposed animals should be tested. At least 10 animals of each sex should be used at each dose level. If interim sacrifices are planned. the number should be increased by the number of animals scheduled to be sacrificed before the end of the study. Animals should be randomly assigned to treatment and control groups.

(3) *Control groups.* (i) A concurrent ("sham" exposure or vehicle) control group is required. Subjects should be treated in the same way as for an exposure group except that administration of the test substance is omitted.0, RULES AND REGS) A35AD0 Barrett. Douglas 04942 7–29–85 J. 54–999 File a35ad0.422 Folio 1110–11

(ii) Concurrent or historic data from the laboratory performing the testing should provide evidence of the ability of the procedures used to detect major neurotoxic endpoints such as limb weakness or paralysis (e.g.. acrylamide). CNS stimulation (e.g.. β. β'-iminodipropionitrile) autonomatic signs (e.g.. physostigmine).

(iii) A satellite group may be treated with the high dose level for the duration of exposure and observed for reversibility. persistence. or delayed occurrence of toxic effects for a post-treatment period of appropriate duration. normally not less than 28 days.

(4) *Dose levels and dose selection.* At least 3 doses. equally spaced on a log scale (e.g.. ½ log units) over a range of at least 1 log unit shall be used in addition to a zero dose or vehicle administration. The data should be sufficient to produce a dose-effect curve.

(i) The highest dose shall produce (A) clear behavioral effects or (B) life-threatening toxicity.

(ii) The data from the lower doses must show either (A) graded dose-dependent effects at 2 dose levels or (B) no effects at 2 dose levels. respectively.

(5) *Duration and frequency of exposure.* The duration and frequency of exposure will be specified in the test rule.

(6) *Route of exposure.* The test substance shall be administered by the route specified in the test rule. This route will usually be the one most closely approximating the expected route of human exposure. The exposure potocol shall conform to that outlined in the appropriate acute or subchronic toxicity study guideline under Subpart B or Subpart C of this Part.

(7) *Combined protocol.* Subjects used for other toxicity studies may be used if none of the requirements of either study are violated by the combination.

(8) *Study conduct.* (i) All animals in a given study should be observed carefully by the same trained technician who is blind with respect to the animals' treatments. All animals should be observed prior to initiation of exposure. Subsequent observations should be made with sufficient frequency to ensure the detection of behavioral and/or neurologic abnormalities. if present. At minimum. observations at 1 hour. 6 hours. 24 hours. 7 days. and 14 days and monthly thereafter are recommended. In a subchronic study. subsequent to the first exposure. all observations should be made before the daily exposue. The animals should be removed from the home cage to a standard arena for observation. Effort should be made to ensure that variations in the test conditions are minimal and are not systematically related to treatment. Among the variables that can affect behavior are sound level. temperature. humidity. lighting. odors. time of day. and environmental distractions. Explicit. operationally defined. scales for each function should be used. The development of objective quantitative measures of the observational endpoints specified is encouraged.

(ii) The following is a minimal list of observations that should be noted:

(A) Any unusual responses with respect to body position. activity level. coordination of movement. and gait.

(B) Any unusual or bizarre behavior including. but not limited to. headflicking. head searching. compulsive biting or licking. self-mutilation. circling. and walking backwards.

(C) The presence of:

(*1*) Convulsions.

(*2*) Tremors.

(*3*) Increased levels of lacrimation and/or red-colored tears.

(*4*) Increased levels of salivation.

(*5*) Piloerection.

(*6*) Pupillary dilation or constriction.

(*7*) Unusual respiration (shallow. labored. dyspneic. gasping. and retching) and/or mouth breathing.

(*8*) Diarrhea.

(*9*) Excessive or diminished urination.

(*10*) Vocalization.

(D) Forelimb/hindlimb grip strength. The procedure described by Meyer et al. (1979). under paragraph (f)(9) of this section is recommended.

(E) Sensory function. A simple assessment of sensory function (vision audition. pain perception) should be made. Marshall et al. (1971) under paragraph (f)(8) of this section have described a neurologic exam for this purpose; these procedures are also discussed by Deuel (1977). under paragraph (f)(4) of this section. Irwin (1968) under paragraph (f)(7) of this section described a number of reflex tests intended to detect gross sensory deficits. including the visual placing response. Preyer reflex. and tail pinch. Many procedures have been developed for assessing pain perception (e.g.. Ankier. 1974 under paragraph (f)(1) of this section: D'Amour and Smith 1941 under paragraph (f)(3) of this section: Evans 1971 under paragraph (f)(6) of this section).

(e) *Data reporting and evaluation.* In addition to the reporting requirements specified under 40 CFR Part 792 Subpart J the final test report must include the following information.

(1) *Description of system and test methods.* (i) A detailed description of the procedures used to standardize observation. including the arena and operational definitions for scoring observations.

(ii) Positive control data from the laboratory performing the test that demonstrate the sensitivity of the procedures being used. Historic data may be used if all aspects of the experimental protocol are the same. including personnel.

(2) *Results.* The following information must be arranged by test group dose level.

(i) In tabular form. data for each animal must be provided showing.

(A) Its identification number.

(B) Its body weight and score on each sign at each observation time. the time and cause of death (if appropriate).

(ii) Summary data for each group must include:

(A) The number of animals at the start of the test.

(B) The number of animals showing each observation score at each observation time.

(C) The percentage of animals showing each abnormal sign at each observation time.

(D) The mean and standard deviation for each continuous endpoint at each observation time.

(3) *Evaluation of data.* The findings of a functional observational battery should be evaluated in the context of preceding and/or concurrent toxicity studies and any correlative histopathological findings. The evaluation should include the relationship between the doses of the test substance and the presence or absence. incidence and severity. of any neurotoxic effects. The evaluation should include appropriate statistical analyses. Choice of analyses should consider tests appropriate to the experimental design and needed adjustments for multiple comparisons.

(f) *References.* For additional background information on this test guideline the following references should be consulted:

(1) Ankier. S.I. "New hot plate tests to quantify antinociceptic and narcotic antagonist activities." *European Journal of Pharmacology.* 27: 1–4 (1974).

(2) Coughenour. L.L.. McLean. J.R. and Parker. R.B. "A new device for the rapid measurement of impaired motor function in mice." *Pharmacology. Biochemistry and Behavior.* 6: 351–353 (1977).

(3) D'Amour. F.E.. Smith. D.L. "A method for determining loss of pain sensation." *Journal of Pharmacology and Experimental Therapeutics.* 72: 74–79 (1941).

(4) Deuel. R.K. "Determining sensory deficits in animals." *Methods in Psychobiology* Ed. Myers R.D. (New York: Academic Press. 1977) pp. 99–125.

(5) Edwards. P.M.. Parker. V.H. "A simple. sensitive and objective method for early assessment of acrylamide neuropathy in rats." *Toxicology and*

Applied Pharmacology, *40*: 589–591 (1977).

(6) Evans, W.O. "A new technique for the investigation of some analgesic drugs on reflexive behavior in the rat." *Psychopharmacologia*, *2*: 318–325 (1961).

(7) Irwin, S. "Comprehensive observational assessment: Ia. A systematic quantitative procedure for assessing the behavioral and physiologic state of the mouse." *Psychopharmacologia*, *13*: 222–257 (1968).

(8) Marshall, J.F., Turner, B.H., Teitlbaum, P. "Sensory neglect produced by lateral hypothalamic damage." *Science*, *174*: 523–525 (1971).

(9) Meyer, O.A., Tilson, H.A., Byrd, W.C., Riley, M.T. "A method for the routine assessment of fore- and hindlimb grip strength of rats and mice." *Neurobehavioral Toxicology*, *1*: 233–236 (1979).

§ 798.6200 Motor activity.

(a) *Purpose*—(1) *General*. In the assessment and evaluation of the toxic characteristics of a substance, determination of the effects of administration of the substance on motor activity is useful when neurotoxicity is suspected.

(2) *Acute Motor Activity Test*. The purpose of the acute motor activity test is to examine changes in motor activity occurring over a range of acute exposure levels. These changes may then be evaluated in the context of changes occurring in other organ systems. This test is an initial step in determining the potential of a substance to produce acute neurotoxicity and may be used to screen members of a class of substances for known neurotoxicity, and/or to establish a dosage regimen prior to the initiation of subchronic neurotoxicity testing.

(3) *Subchronic Motor Activity Test*. The purpose of the subchronic motor activity test is to determine whether the repeated administration of a suspected neurotoxicant results in changes in motor activity. These changes may be evaluated in the context of changes occurring in other organ systems. This test is an initial step in determining the potential of a substance to produce subchronic neurotoxicity.

(b) *Definitions*. (1) Neurotoxicity is the adverse effect on the structure or function of the central and/or peripheral nervous system related to exposure to a chemical substance.

(2) Motor activity is any movement of the experimental animal.

(3) A toxic effect is an adverse change in the structure or function of an experimental animal as a result of exposure to a chemical substance.

(c) *Principle of the test method*. The test substance is administered to several groups of experimental animals, one dose being used per group. Measurements of motor activity are made. The exposure levels at which significant changes in motor activity are produced are compared to those levels which produce toxic effects not originating in the central and/or peripheral nervous system.

(d) *Test procedures*—(1) *Animal selection*—(i) *Species and strain*. Testing shall be performed in a laboratory rat or mouse. The choice of species should take into consideration such factors as the comparative metabolism of the chemical and species sensitivity to the toxic effects of the test substance, as evidenced by the results of other studies, the potential for combined studies, and the availability of other toxicity data for the species.

(ii) *Age*. Young adult animals (at least 42 days old for rat or mouse) should be used.

(iii) *Sex*. (A) Equal numbers of animals of each sex are required for each dose level for the motor activity test.

(B) The females should be nulliparous and nonpregnant.

(2) *Number of animals*. Animals shall be randomly assigned to test and control groups. Each test or control group must be designed to contain a sufficient number of animals at the completion of the study to detect a 40 percent change in activity of the test groups relative to the control group with 90 percent power at the 5 percent level. For most designs, calculations can be made according to Dixon and Massey (1957) under paragraph (f)(1) of this section, Neter and Wasserman (1974) under paragraph (f)(5) of this section, Sokal and Rohlf (1969) under paragraph (f)(9) of this section, or Jensen (1972) under paragraph (f)(3) of this section.

(3) *Control groups*. (i) A concurrent control group is required. This group must be an untreated group, or, if a vehicle is used in administering the test substance, a vehicle control group. If the toxic properties of the vehicle are not known or cannot be made available, both untreated and vehicle control group are required.

(ii) Positive control data are required to demonstrate the sensitivity and reliability of the activity measuring device and testing procedure. These data should demonstrate the ability to detect increases or decreases in activity and to generate a dose-effect curve or its equivalent using three values of the dose or equivalent independent variable. A single administration of the dose (or equivalent) is sufficient. It is recommended that chemical exposure be used to collect positive control data. Positive control data shall be collected at the time of the test study unless the laboratory can demonstrate the adequacy of historical data for this purpose.

(iii) A satellite group may be treated with the high dose level for 90 days and observed for reversibility, persistence or delayed occurrence of toxic effects for a post-treatment period of appropriate length, normally not less than 28 days.

(4) *Dose levels and dose selection*. At least 3 doses, equally spaced on a log scale (e.g., ½ log units) over a range of at least 1 log unit shall be used in addition to a zero dose or vehicle administration. The data should be sufficient to produce a dose-effect curve.

(i) The highest dose shall produce (A) clear effects on motor activity or (B) life-threatening toxicity.

(ii) The data from the lower doses must show either (A) graded dose-dependent effects at 2 dose levels or (B) no effects at 2 dose levels, respectively.

(5) *Duration of testing*. The duration of exposure will be specified in the test rule.

(6) *Route of administration*. The test substance shall be administered by the method specified in the test rule. This will usually be the route most closely approximating the route of human exposure. The exposure protocol shall conform to that outlined in the appropriate acute or subchronic toxicity study guideline.

(7) *Combined protocol*. The tests described herein may be combined with any other toxicity study, as long as none of the requirements of either are violated by the combination.

(8) *Study conduct*—(i) *General*. Motor activity must be monitored by an automated activity recording apparatus. The device used must be capable of detecting both increases and decreases in activity, i.e. baseline activity as measured by the device must not be so low as to preclude decreases nor so high as to preclude increases. Each device shall be tested by standard procedure to ensure, to the extent possible, reliability of operation across devices and across days for any one device. In addition, treatment groups must be balanced across devices. Each animal shall be tested individually. The test session shall be long enough for motor activity to approach asymptotic levels by the last 20 percent of the session for most treatments and animals. All sessions should have the same duration. Treatment groups shall be counter-balanced across test times. Effort should be made to ensure that variations in the

test conditions are minimal and are not systematically related to treatment. Among the variables which can affect motor activity are sound level, size and shape of the test cage, temperature, relative humidity, lighting conditions, odors, use of home cage or novel test cage and environmental distractions. Tests shall be executed by an appropriately trained individual.

(ii) *Acute.* Testing shall be timed to include the time of peak signs.

(iii) *Subchronic.* All animals shall be tested prior to initiation of exposure and at 30 ±2, 60 ±2 and 90 ±2 days during the exposure period. Testing shall occur prior to the daily exposure. Animals shall be weighed on each test day and at least once weekly during the exposure period.

(e) *Data reporting and evaluation.* In addition to the reporting requirements specified under 40 CFR Part 792, Subpart J the final test report must include the following information:

(1) *Description of system and test methods.* (i) Positive control data from the laboratory performing the test which demonstrate the sensitivity of the procedure being used.

(ii) Procedures for calibrating and assuring the equivalence of devices and balancing treatment groups.

(2) *Results.* The following information must be arranged by test group (dose level).

(i) In tabular form, data must be provided showing for each animal:

(A) Its identification number.

(B) Body weight, total session activity counts, and intrasession subtotals for each date measured.

(ii) Group summary data should also be reported.

(3) *Evaluation of data.* An evaluation of the test results (including statistical analysis comparing total activity counts at the end of exposure of treatment vs control animals must be made and supplied. This submission must include dose-effect curves for motor activity expressed as activity counts.

(f) *References.* For additional background information on this test guideline the following references should be consulted:

(1) Dixon, W.J., Massey, E.J. *Introduction to Statistical Analysis* 2nd Ed. (New York: McGraw-Hill, 1957).

(2) Finger, F.W. "Measuring behavioral activity." *Methods in Psychobiology* Vol. 2. Ed. R.D. Myers (New York: Academic, 1972) pp. 1–19.

(3) Jensen, D.R. "Some simultaneous multivariate procedures using Hotelling's T^2 Statistics." *Biometrics*, 28:39–53 (1972).

(4) Kinnard, E.J. and Watzman, N. "Techniques utilized in the evaluation of psychotropic drugs on animals activity." Journal of Pharmaceutical Sciences, 55:995–1012 (1966).

(5) Neter, J. and Wasserman, W. *Applied Linear Statistical Models.* Homewood, Richard D. Irwin, Inc., 1974.

(6) Reiter, L.E. "Use of activity measures in behavioral toxicology." *Environmental Health Perspectives,* 26:9–20 (1978).

(7) Reiter, L.W. and MacPhail, R.C. "Motor Activity: A survey of methods with potential use in toxicity testing." *Neurobehavioral Toxicology,* 1: Suppl. 1, 53–66 (1979).

(8) Robbins, T.W. "A critique of the methods available for the measurement of spontaneous motor activity." *Handbook of Psychopharmacology.* Vol. 7. Eds. Iversen, L.L., Iversen, D.S., Snyder, S.H. (New York: Plenum, 1977) pp. 37–82.

(9) Sokal, R.P. and Rohlf, E.J. *Biometry.* (San Francisco: W.H. Freeman and Co., 1969).

§ 798.6400 Neuropathology.

(a) *Purpose.* The techniques in this guideline are designed to develop data on morphologic changes in the nervous system for chemical substances and mixtures subject to such testing under the Toxic Substances Control Act. The data will detect and characterize morphologic changes, if and when they occur, and determine a no-effect level for such changes. Neuropathological evaluation should be complemented by other neurotoxicity studies, e.g. behavioral and neurophysiological studies. Neuropathological evaluation may be done following acute, subchronic or chronic exposure.

(b) *Definition.* Neurotoxicity or a neurotoxic effect is an adverse change in the structure or function of the nervous system following exposure to a chemical agent.

(c) *Principle of the test method.* The test substance is administered to several groups of experimental animals, one dose being used per group. The animals are sacrificed and tissues in the nervous system are examined grossly and prepared for microscopic examination. Starting with the highest dosage level, tissues are examined under the light microscope for morphologic changes, until a no effect level is determined. In cases where light microscopy has revealed neuropathology, the no effect level may be confirmed by electron microscopy.

(d) *Test procedure*—(1) *Animal selection*—(i) *Species and strain.* Testing should be performed in the species being used in other tests for neurotoxicity. This will generally be the laboratory rat. The choice of species shall take into consideration such factors as the comparative metabolism of the chemical and species sensitivity to the toxic effects of the test substance, as evidenced by the results of other studies, the potential for combined studies, and the availability of other toxicity data for the species.

(ii) *Age.* Animals shall be young adults (150–200 gm for rats) at the start of exposure.

(iii) *Sex.* Both sexes should be used unless it is demonstrated that one sex is refractory to the effects.

(2) *Number of Animals.* A minimum of six animals per group shall be used. The tissues from each animal shall be examined separately. It is recommended that ten animals per group be used.

(3) *Control Groups.* (i) A concurrent control group(s) is (are) required. This group must be an untreated control group or, if a vehicle is used in administering the test substance, a vehicle control group. If the vehicle used has a known or potential toxic property, both untreated and vehicle control groups are required.

(ii) A satellite group of animals may be treated with the high level for 90 days and observed for reversibility, persistence, or delayed occurrence of toxic effects for a post-treatment period of appropriate length; normally not less than 28 days.

(4) *Dose Levels and Dose Selection.* At least 3 doses, equally spaced on a log scale (e.g., ½ log units) over a range of at least 1 log unit shall be used in addition to a zero dose or vehicle administration. The data should be sufficient to produce a dose-effect curve.

(i) The highest dose shall produce (A) clear behavioral effects or (B) life-threatening toxicity.

(ii) The data from the lower doses must show either (A) graded dose-dependent effects at two dose levels or (B) no effects at two dose levels, respectively.

(5) *Duration of testing.* The exposure duration will be specified in the test rule. This will generally be 90 days exposure.

(6) *Route of administration.* The test substance shall be administered by a route specified in the test rule. This will generally be the route most closely approximating the route of human exposure. The exposure protocol shall conform to that outlined in the appropriate acute or subchronic toxicity guideline.

(7) *Combined protocol.* The tests described herein may be combined with any other toxicity study, as long as none of the requirements of either are violated by the combination.

(8) *Study conduct*—(i) *Observation of animals.* All toxicological (e.g., weight loss) and neurological signs (e.g., motor disturbance) shall be recorded frequently enough to observe any abnormality, and not less than weekly.

(ii) *Sacrifice of animals*—(A) *General.* The goal of the techniques outlined for sacrifice of animals and preparation of tissues is preservation of tissues morphology to simulate the living state of the cell.

(B) *Perfusion technique.* Animals shall be perfused *in situ* by a generally recognized technique. For fixation suitable for light or electronic microscopy, saline solution followed by buffered 2.5 percent glutaraldehyde or buffered 4.0 percent paraformaldehyde, is recommended. While some minor modifications or variations in procedures are used in different laboratories, a detailed and standard procedure for vascular perfusion may be found in the text by Zeman and Innes (1963) under paragraph (F)(7) of this section, Hayat (1970) under paragraph (F)(3) of this section, and by Spencer and Schaumburg (1980) under paragraph (F)(6) of this section. A more sophisticated technique is described by Palay and Chan-Palay (1974) under paragraph (F)(4) of this section.

(C) *Removal of brain and cord.* After perfusion, the bonystructure (cranium and vertebral column) should be exposed. Animals should then be stored in fixative-filled bags at 4 °C for 8–12 hours. The cranium and vertebral column shall, be removed carefully by trained technicians without physical damage of the brain and cord. Detailed dissection procedures may be found in the text by Palay and Chan-Palay (1974) under paragraph (F)(4) of this section. After removal, simple measurement of the size (length and width) and weight of the whole brain (cerebrum, cerebellum, pons-medulla) should be made. Any abnormal coloration or discoloration of the brain and cord should also be noted and recorded.

(D) *Sampling.* Unless a given test rule specifies otherwise, cross-sections of the following areas shall be examined: the forebrain, the center of the cerebrum, the midbrain, the cerebellum and pons, and the medulla oblongata; the spinal cord at cervical and lumbar swelling (C_3–C_6 and L_1–L_4); Gasserian ganglia, dorsal root ganglia (C_3–C_6, L_1–L_4), dorsal and ventral root fibers (C_3–C_6, L_1–L_4), proximal sciatic nerve (mid-thigh and sciatic notch), sural nerve (at knee), and tibial nerve (at knee). Other sites and tissue elements (e.g., gastrocnemius muscle) should be examined if deemed necessary. Any observable gross changes shall be recorded.

(iii) *Specimen storage.* Tissue samples from both the central and peripheral nervous system shall be further immersion fixed and stored in appropriate fixative (e.g., 10 percent buffered formalin for light microscopy; 2.5 percent buffered gluteraldehyde or 4.0 percent buffered paraformaldehyde for electron microscopy) for future examination. The volume of fixative versus the volume of tissues in a specimen jar shall be no less than 25:1. All stored tissues should be washed with buffer for at least 2 hours prior to further tissue processing.

(iv) *Histopathology examination.* (A) *Fixation.* Tissue specimens stored in 10 percent buffered formalin may be used for this purpose. All tissues must be immersion fixed in fixative for at least 48 hours prior to further tissue processing.

(B) *Dehydration.* All tissue specimens should be washed for at least 1 hour with water or buffer, prior to dehydration. (A longer washing time is needed if the specimens have been stored in fixative for a prolonged period of time.) Dehydration can be performed with increasing concentration of graded ethanols up to absolute alcohol.

(C) *Clearing and embedding.* After dehydration, tissue specimens shall be cleared with xylene and embedded in paraffin or paraplast. Multiple tissue specimens (e.g. brain, cord, ganglia) may be embedded together in one single block for sectioning. All tissue blocks shall be labelled showing at least the experiment number, animal number, and specimens embedded.

(D) *Sectioning.* Tissue sections, 5 to 6 microns in thickness, shall be prepared from the tissue blocks and mounted on standard glass slides. It is recommended that several additional sections be made from each block at this time for possible future needs for special stainings. All tissue blocks and slides shall be filed and stored in properly labeled files or boxes.

(E) *Histopathological techniques.* Although the information available for a given chemical substance may dictate test-rule specific changes, the following general testing sequence is proposed for gathering histopathological data:

(*1*) *General staining.* A general staining procedure shall be performed on all tissue specimens in the highest treatment group. Hematoxylin and eosin (H&E) shall be used for this purpose. The staining shall be differentiated properly to achieve bluish nuclei with pinkish background.

(*2*) *Special stains.* Based on the results of the general staining, selected sites and cellular components shall be further evaluated by the use of specific techniques. If H&E screening does not provide such information, a battery of stains shall be used to assess the following components in all appropriate required samples: neuronal body (e.g., Einarson's gallocyanin), axon (e.g., Bodian), myelin sheath (e.g., Kluver's Luxol Fast Blue) and neurofibrils (e.g., Bielchosky). In addition, peripheral nerve fiber teasing shall be used. Detailed staining methodology is available in standard histotechnological manuals such as AFIP (1968) under paragraph (f)(1) of this section, Ralis et al. (1973) under paragraph (f)(5) of this section, and Chang (1979) under paragraph (f)(2) of this section. The nerve fiber teasing technique is discussed in Spencer and Schaumberg (1980) under paragraph (f)(6) of this section. A section of normal tissue shall be included in each staining to assure that adequate staining has occurred. Any changes shall be noted and representative photographs shall be taken. If a lesion(s) is observed, the special techniques shall be repeated in the next lower treatment group until no further lesion is detectable.

(*3*) *Alternative technique.* If the anatomical locus of expected neuropathology is well-defined, epoxy-embedded sections stained with toluidine blue may be used for small sized tissue samples. This technique obviates the need for special stains for cellular components. Detailed methodology is available in Spencer and Schaumberg (1980) under paragraph (f)(6) of this section.

(*4*) *Electron microscopy.* Based on the results of light microscopic evaluation, specific tissue sites which reveal a lesion(s) shall be further evaluated by electron microscopy in the highest treatment group which does not reveal any light microscopic lesion. If a lesion is observed, the next lower treatment group shall be evaluated until no significant lesion is found. Detailed methodology is available in Hayat (1970) under paragraph (f)(3) of this section.

(F) *Examination*—(*1*) *General.* All stained microscopic slides shall be examined with a standard research microscope. Examples of cellular alterations (e.g., neuronal vacuolation, degeneration, and necrosis) and tissue changes (e.g., gliosis, leukocytic infiltration, and cystic formation) shall be recorded and photographed.

(*2*) *Electron microscopy.* Since the size of the tissue samples that can be examined is very small, at least 3 to 4 tissue blocks from each sampling site must be examined. Tissue sections must be examined with a transmission electron microscope. Three main categories of structural changes must be considered:

(*i*) *Neuronal body*. The shape and position of the nucleus and nucleolus as well as any change in the chromatin patterns shall be noted. Within the neuronal cytoplasm. cytoplasmic organelles such as mitochondria. lysosomes. neurotubules. neurofilaments. microfilaments. endoplasmic reticulum and polyribosomes (Nissl substance). Golgi complex. and secretory granules shall be examined.

(*ii*) *Neuronal processes*. The structural integrity or alterations of dendrites. axons (myelinated and unmyelinated). myelin sheaths. and synapses shall be noted.

(*iii*) *Supporting cells*. Attention must also be paid to the number and structural integrity of the neuroglial elements (oligodendrocytes. astrocytes. and microglia) of the central nervous system. and the Schwann cells. satellite cells. and capsule cells of the peripheral nervous system. Any changes in the endothelial cells and ependymal lining cells shall also be noted whenever possible. The nature. severity. and frequency of each type of lesion in each specimen must be recorded. Representative lesions must be photographed and labeled appropriately.

(e) *Data collection. reporting. and evaluation*. In addition to information meeting the requirements stated under 40 CFR Part 792 Subpart J. the following specific information should be reported:

(1) *Description of test system and test methods*. A description of the general design of the experiment should be provided. This should include a short justification explaining any decisions where professional judgment is involved such as fixation technique and choice of stains.

(2) *Results*. All observations shall be recorded and arranged by test groups. This data may be presented in the following recommended format:

(i) *Description of signs and lesions for each animal*. For each animal. data must be submitted showing its identification (animal number. treatment. dose. duration). neurologic signs. location(s) nature of. frequency. and severity of lesion(s). A commonly-used scale such as 1+. 2+. 3+. and 4+ for degree of severity ranging from very slight to extensive may be used. Any diagnoses derived from neurologic signs and lesions including naturally occurring diseases or conditions. should also be recorded.

(ii) *Counts and incidence of lesions. by test group*. Data shall be tabulated to show: (A) The number of animals used in each group. the number of animals displaying specific neurologic signs. and the number of animals in which any lesion was found: (B) The number of animals affected by each different type of lesion. the average grade of each type of lesion. and the frequency of each different type and/or location of lesion.

(iii) *Evaluation of data*. (A) An evaluation of the data based on gross necropsy findings and microscopic pathology observations shall be made and supplied. The evaluation shall include the relationship. if any. between the animal's exposure to the test substance and the frequency and severity of the lesions observed.

(B) The evaluation of dose-response. if existent. for various groups shall be given. and a description of statistical method must be presented. The evaluation of neuropathology data should include. where applicable. an assessment in conjunction with other neurotoxicity studies performed (eg. electrophysiological. behavioral. neurochemical).

(f) *References*. For additional background information on this test guideline the following references should be consulted:

(1) AFIP. *Manual of Histologic Staining Methods*. (New York: McGraw-Hill (1968).

(2) Chang. L.W. *A Color Atlas and Manual for Applied Histochemistry*. (Springfield. IL: Charles C. Thomas. 1979).

(3) Hayat. M.A. "Vol. 1. Biological applications." *Principles and techniques of electron microscopy*. (New York: Van Nostrand Reinhold. 1970)

(4) Palay S.L., Chan-Palay. V. *Cerebellar Cortex: Cytology and Organization*. (New York: Springer-Verlag. 1974.

(5) Ralis. H.M., Beesley. R.A.. Ralis. Z.A. *Techniques in Neurohistology*. (London: Butterworths. 1973).

(6) Spencer. P.S., Schaumburg. H.H. (eds). *Experimental and Clinical Neurotoxicology*. (Baltimore: Williams and Wilkins. 1980).

(7) Zeman. W., JRM Innes. J.R.M. *Craigie's Neuroanatomy of the Rat*. (New York: Academic. 1963).

§ 798.6450 NTE neurotox assay.

(a) *Purpose*. (1) A variety of organophosphorus (O–P) compounds cause a type of delayed neurotoxicity (OPIDN) in which inhibition of the esterase activity of a protein called neurotoxic esterase (NTE) in neural tissue is the primary biochemical correlate and predictor. This guideline will describe the conduct of an assay for measurement of the inhibition of NTE in the brain or spinal cord of animals exposed to O–P. It is based on the method described by Johnson (1975. 1977. 1982) under paragraph (f) (2).(3). and (4) of this section and quotes those sources directly. Other methods for performing the assay have been described by Sprague et al. (1981) under paragraph (f)(6) of this section. Soliman et al. (1982) under paragraph (f)(7) of this section and Caroldi and Lotti (1982) under paragraph (f)(1) of this section for peripheral nerve. These and other assays are reviewed by Johnson (1982) under paragraph (f)(4) of this section and Johnson and Richardson (1983) under paragraph (f)(5) of this section. This biochemical test is intended as an adjunct to a behavioral and pathological study in hens.

(2) NTE measurements provide objective quantitative data on the first step in initiation of OPIDN. Thus. they can be a great help in evaluating studies where the more poorly quantified behavioral or pathological data may be equivocal. or where the adequacy of a negative study is at issue. The second step necessary is "aging" of the phosphorylated NTE (the loss of an R group resulting in a negatively charged substituent bound to NTE). Not all O–P that inhibit NTE. then. cause OPIDN. but all neuropathic O–P inhibit NTE.

(3) Thus. the NTE assay is a valuable adjunct to but not a complete replacement for in-vivo testing. Johnson (1982) (under paragraph (f)(4) of this section has proposed a detailed testing scheme for combining the NTE assay with behavioral and histopathological studies in hens. Such combined testing can be faster. more accurate. and less expensive than the current EPA approach. OTS encourages testing schemes that combine this assay with in-vivo studies.

(b) *Definitions*. (1) Organophosphorus induced delayed neurotoxicity (OPIDN) is a neurological syndrome in which limb weakness and upper motor neuron spasticity are the predominant clinical signs and distal axonopathy of peripheral nerve and spinal cord are the correlative pathological signs. Clinical signs and pathology first appear between 1 and 2 weeks following exposure which normally inhibits greater than 80 percent of NTE (For O–Ps that "age").

(2) Neurotoxic target esterase (NTE) is a membrane-bound neural protein that hydrolyzes phenyl valerate and is highly correlated with the initiation of OPIDN. NTE activity is operationally defined as the phenyl valerate hydrolytic activity resistant to paraoxon but sensitive to mipafox or neuropathic O–P ester inhibition.

(c) *Principle of the test method.* The test method is a differential assay of the ability of neural tissue, following O–P exposure, to selectively hydrolyze a phenyl valerate substrate. The principle of the assay is first, to determine the amount of hydrolysis that occurs in the presence of a non-neurotoxic inhibitor, paraoxon, (a), which is intended to occupy irrelevant sites. Second, we determine the activity in the presence of paraoxon and a known neuropathic inhibitor, mipafox, (b). NTE activity is the difference between (a) and (b), that is, the proportion of activity inhibited only by mipafox. Thus, the "mipafox site" is already occupied following exposure to a neuropathic O–P ester and the activity of (b) is therefore reduced.

(d) *Testing procedure.* Because this guideline is intended as an adjunct to an in-vivo study, only those aspects of study conduct specific to the assay will be described.

(1) *Animal selection.* The adult domestic laying hen is recommended. Standard size breeds and strains should be employed.

(2) *Number of animals.* (i) At least four hens/dose or control group should be used.

(ii) It is recommended that at least two hens be dosed with a known neuropathic O–P as a positive control. Tri-o-tolyl phosphate (TOCP) or diisopropyl phosphorofluoridate (DFP) can be used but TOCP is recommended because of its low acute toxicity.

(3) *Materials.* To conduct this assay, you will need paraoxon (diethyl 4-nitrophenyl phosphate), mipafox (N, N'-diisopropylphosphorodiamido fluoridate), and phenyl valerate. Johnson (1977) under paragraph (f)(3) of this section includes a detailed description of the steps necessary for the synthesis, purification, and storage of these chemicals. Paraoxon can be obtained commercially.

(4) *Study conduct.* (i) The assay should be performed on the whole brain and spinal cord of subjects sacrificed 24 hours following acute exposure, and at regular intervals, e.g., weekly, during repeated exposure. The last measurement should follow the last exposure by 24 or 48 hours. Each assay should be performed in duplicate.

(ii) The assay has four stages: preparation of tissue; differential preincubation; hydrolysis of substrate; and measurement of product. The quotations that follow are from Johnson (1977) as corrected or modified in Johnson (1982). His is the best known method for conduct of this assay. Other acceptable methods have been used. They primarily involve minor technical modification (Sprague et al. 1981 under paragraph (f)(7) of this section and Soliman et al. 1982 under paragraph (f)(6) of this section). Testers are encouraged to discuss planned methods with EPA prior to conducting testing for approval.

(A) *Preparation of tissue.* "Normal or dosed birds are killed by cervical dislocation. The head is cut off and the whole brain removed and cooled in ice-cold buffer (50 mM Tris/0.2 mM EDTA adjusted to pH 8.0 at 25° with HCL). Meninges and blood vessels are rapidly removed and the brain is blotted dry, weighed, and homogenized thoroughly in ice-cold buffer (6.5 ml/g) using a high-speed rotating perspex pestle with not more than 0.25 mm difference in diameter between pestle and tube. The homogenate is then diluted to 1 g/65 ml for assay."

(B) *Differential preincubation.* "Paired samples of homogenate (equivalent to about 6.0 mg tissue) are pre-incubated in Tris/EDTA buffer pH 8 at 37° for exactly 20 minutes with paraoxon (40 to 100 uM) plus either (a) buffer or (b) mipafox (50uM) in a final volume of 2 ml." This step is essential.

(C) *Hydrolysis of substrate.* "After preincubation, dispersion (2ml) of phenyl valerate is added and the incubation is continued for exactly 15 minutes. The dispersion is prepared by adding a solution of Triton X–100 (0.03 percent in water) (30 vol) to a solution of phenyl valerate (15 or 30 mg/ml) in redistilled dimethylformamide (1 vol) and mixing thoroughly (by swirling): other solvents give less satisfactory dispersions. Reaction is stopped by adding 2 ml of sodium dodecyl sulphate (1% w/v) in buffer containing 4-aminoantipyrine (otherwise known as 4-aminophenazone) (0.25 percent)."

(D) *Measurement of product.* This assay is based on the colorimetric detrimination of liberated phenol.

(*1*) "The coupling of phenol liberated in the assay with the aminoantipyrine may be performed at any convenient time after quenching the enzyme: 1 ml of $K_3Fe(CN)_6$ (0.4 percent in water) is added and the stable red colour is read at 510 nm."

(*2*) "A non-tissue blank, kept to 10 percent of the "B" (paraoxon tube) value by maintaining the substrate phenol fee, should be included in each group of assay tubes. Typical control absorbance values would be 0.8 for paraoxon, 0.35 for paraoxon and mipafox and 0.07 for the blank. Colour development takes (1–2 min) in solutions stopped with sodium dodecyl sulphate. The extinction coefficient of phenol under these conditions is 13,900. NTE activity is represented by the difference in absorbance obtained from samples incubated under conditions (a) and (b) respectively."

(*3*) "To clarify the incubation media when NTE activity of spinal cord homogenates is assayed, (up to 16 mg wet weight/tube), increase sodium dodecyl sulphate concentration to 2 percent. Under standard conditions NTE hydrolyzes about 2400 umol of substrate/min/g of cortex, 550 for spinal cord, and 100 for sciatic nerve."

(e) *Data reporting and evaluation*—(1) *Test report.* In addition to the reporting requirements specified in the EPA Good Laboratory Practice Standards under 40 CFR Part 792, Subpart J, The final test report must include the following information:

(i) Neurotoxic esterase data including absorbance values for each subject tested.

(ii) Indication of whether each subject survived to sacrifice or time of death.

(iii) Data from control animals and blank samples.

(iv) Statistical evaluation of results.

(2) *Evaluation of results.* (i) Results should be evaluated in terms the extent of inhibition as a function of treatment and dose, comparison to inhibition of acetylcholinesterase (Ach E) where available, lethal potency, and data on blank samples and control group results.

(ii) Results on NTE should be compared to and evaluated with behavioral and histopathological data. Sequential data from repeated exposures studies should also be evaluated for evidence that the NTE level has plateaued.

(f) *References.* For additional background information on this test guideline the following references should be consulted:

(1) Caroldi, S., Lotti, M. "Neurotoxic Esterase in Peripheral Nerve: Assay, Inhibition, and Rate of Resynthesis." *Toxicology and Applied Pharmacology*, 62, 498–501 (1982).

(2) Johnson, M.K. "The Delayed Neuropathy Caused By Some Organophosphorus Esters: Mechanism and Challenge." *Critical Reviews In Toxicology*, 3, 289–316 CRC Press, Inc. (1975).

(3) Johnson, M.K. "Improved Assay of Neurotoxic Esterase for Screening Organophosphates for Delayed Neurotoxicity Potential." *Archives of Toxicology*, 37, 113–115 (1977).

(4) Johnson, M.K. "The Target of Initiation of Delayed Neurotoxicity by Organophosphorus Esters: Biochemical Studies and Toxicological Applications." Reviews in *Biochemical Toxicology*, 4, Eds. Hodgson, E., Bend, Jr., Philpot, R.M., (Elsevier: New York, 1982): pp. 141–212.

(5) Johnson, M.K., Richardson, R.J. "Biochemical Endpoints: Neurotoxic Esterase Assay." *Neurotoxicology*, 4(2): 311–320 (1983).

(6) Soliman, S.A., Linder, R., Farmer, J., Curley, A. "Species Susceptibility to Delayed Toxic Neuropathy in relation to in vivo inhibition of Neurotoxic Esterase by Neurotoxic Organophosphorus Esters." *Journal of Toxicology and Environmental Health*, 9, 189–197 (1982).

(7) Sprague, G.L., Sandvik, L.L., Bickford, A.A. "Time course for neurotoxic esterase activity in hens given multiple diisopropyl fluorophosphate injections." *Neurotoxicology*, 2, 523–532 (1981).

§ 798.6500 Schedule-controlled operant behavior.

(a) *Purpose.* (1) In the assessment and evaluation of the potential human health effects of substances, it may be necessary to test for functional neurotoxic effects. Substances that have been observed to produce neurotoxic signs in other toxicity studies (e.g. CNS depression or stimulation), as well as substances with a structural similarity to known neurotoxicants should be evaluated for these effects.

(2) This guideline defines procedures for conducting studies of schedule-controlled operant behavior, one way of evaluating functional neurotoxic effects (Dews, 1972 under paragraph(f)(1) of this section; NAS 1975, 1977, 1982 under paragraph (f)(4), (5) and (6) of this section). Our purpose is to evaluate the effects of acute and repeated exposures on the rate and pattern of responding under schedules of reinforcement. Operant behavior tests may be used to evaluate many other aspects of behavior (Laties, 1978 under paragraph (f)(3) of this section). Additional tests may be necessary to completely assess the behavioral effects of any substance. Behavioral evaluation should be used in conjunction with neuropathologic evaluation and the evaluation of other toxic effects.

(b) *Definitions*—(1) *Neurotoxicity.* Neurotoxicity or a neurotoxic effect is an adverse change in the structure or function of the nervous system following exposure to a chemical agent. Behavioral toxicity is an adverse change in the functioning of the organism with respect to its environment following exposure to a chemical agent.

(2) *Operant, operant behavior, operant conditioning.* An operant is a class of behavioral responses which change or operates on the environment in the same way. Operant behavior is further distinguished as behavior which is modified by its consequences. Operant conditioning is the experimental procedure used to modify some class of behavior by reinforcement or punishment.

(3) *Schedule of reinforcement.* A schedule of reinforcement specifies the relation between behavioral responses and the delivery of reinforcers, such as food or water (Ferster and Skinner, 1957 under paragraph (f)(2) of this section). For example, a fixed ratio (FR) schedule requires a fixed number of responses to produce a reinforcer (e.g. FR 30). On a fixed interval (FI) schedule, the first response after a fixed period of time is reinforced (e.g. FI 5 minutes).

(c) *Principle of the test method.* Experimental animals are trained to perform under a schedule of reinforcement and measurements of their operant behavior are made. Several doses of the test substance are then administered according to the experimental design (between groups or within subjects) and the duration of exposure (acute or repeated). Measurements of the operant behavior are repeated. A descriptive and statistical evaluation of the data is made to evaluate the nature and extent of any changes in behavior in relation to exposures to the test substance. Comparisons are made between any exposures that influence the behavior and exposures that have neuropathological effects or effects on other targets of the chemical.

(d) *Test procedures*—(1) *Experimental design.* These test procedures may be used to evaluate the behavior of experimental animals receiving either acute or repeated exposures. For acute exposure studies, either within-subject or between groups, experimental designs may be used. For repeated exposure studies, between groups designs should be used, but within subject comparisons (pre-exposure and post-exposure) are recommended and encouraged.

(2) *Animal selection*—(i) *Species.* (A) For most studies, the laboratory mouse or rat is recommended. Standard strains should be used.

(B) Under some circumstances other species may be recommended.

(ii) *Age.* Experimental animals should be young adults. Rats or mice should be at least 14 and 6 weeks old, respectively, prior to exposure.

(iii) *Sex.* (A) Approximately equal numbers of male and female animals are required for each dose level and control group.

(B) Virgin females should be used.

(iv) *Experimental history.* Animals should be experimentally and chemically naive.

(3) *Number of animals.* Six to twelve animals should be exposed to each level of the test substance and/or control procedure. If post exposure effects are examined, a separate group, 6 to 12 additional animals not sacrificed for pathology, will required in subchronic studies.

(4) *Control groups*—(i) *Untreated controls.* A concurrent "sham" exposure or vehicle control group or session (according to the design of the study) is required. The subjects should be treated similarly except that administration of the test substance is omitted.

(ii) *Positive controls.* Positive control data is required to demonstrate that the experimental procedures, under the specific conditions in the testing laboratory, are sensitive to substances known to affect operant behavior. Both increases and decreases in response rate should be demonstrated. Data based on acute exposures will be adequate. Data should be collected according to the same experimental design as that proposed for the test substance. Historical data on the procedure collected in the same species and under the same conditions in the testing laboratory may be acceptable, but the presentation of concurrent control data is strongly encouraged since it provides evidence that the test has remained sensitive.

(5) *Dose levels and dose selection.* At least 3 doses, equally spaced over a log scale (e.g., 10, 30, 100), over a range of at least 1 log unit shall be used in addition to a zero dose or vehicle administration. The data should be sufficient to produce a dose-effect curve.

(i) The highest dose shall produce: (A) Clear behavioral effects; or (B) life-threatening toxicity.

(ii) The data from the lower doses must show either: (A) Graded dose-dependent effects at 2 dose levels; or (B) no effects at 2 dose levels, respectively.

(6) *Duration of exposure.* The duration and frequency of exposure will be specified in the test rule.

(7) *Route of Administration.* The route of administration will also be specified in the test rule and will usually be identical to one of the anticipated or actual routes of human exposure. For some chemicals, another route (e.g. parenteral) may be justified. The exposure protocol should conform to that outlined in the appropriate acute or subchronic toxicity study guideline under Subpart B or Subpart C of this Part.

(8) *Study conduct*—(i) *Apparatus.* Behavioral responses and the delivery of reinforcers shall be controlled and monitored by automated equipment located so that its operation does not provide unintended cues or otherwise

interfere with the ongoing behavior. Individual chambers should be sound attenuated to prevent disruptions of behavior by external noise. The response manipulanda, feeders, and any stimulus devices should be tested before each session: these devices should periodically be calibrated.

(ii) *Chamber assignment.* Concurrent treatment groups should be balanced across chambers. Each subject should be tested in the chamber to which it is initially assigned.

(iii) *Deprivation and training.* (A) If a nonpreferred positive reinforcer is used, all subjects should be deprived of food until they reach a fixed percentage (e.g. 80 to 90 percent, commonly) of their ad libitum body weight or for a fixed period (e.g., 18 hours) prior to training. Deprivation should be kept constant throughout the study.

(B) Subjects must be trained until they display demonstrable stability in performance across days prior to exposure. One simple and useful criterion is a minimum number of sessions on the schedule and no systematic trend during the 5 days before exposure.

(C) Cumulative records of cumulative responding over time for each animal should be presented to demonstrate that the pattern of responding is representative of that generated by the schedule of reinforcement.

(iv) *Time, frequency, and duration of testing*—(A) *Time of testing.* All experimental animals should be tested at the same time of day and with respect to the time of exposure. For acute studies, testing should be performed when effects are estimated to peak, usually shortly after exposure. For subchronic studies, subjects should be tested prior to daily exposure in order to assess cumulative effects.

(B) *Frequency of testing.* The maintenance of stable operant behavior normally will require regular and frequent (e.g., 5 days a week) testing sessions. Animals should be weighed on each test day.

(C) *Duration of testing.* (*1*) Experimental sessions should be long enough to reasonably see the effects of exposure, but brief enough to be practical. Under most circumstances, a session length of 30–40 minutes should be adequate.

(*2*) If the nature or duration of effects following cessation of repeated exposure are a concern, animals from the high dose group should be tested following exposure for a suitable period of time.

(v) *Schedule selection.* The schedule of reinforcement chosen should generate response rates that may increase or decrease as a function of exposure. Many schedules of reinforcement can do this: a single schedule maintaining a moderate response rate: fixed-interval schedules, which engender a variety of response rates in each interval: or multiple schedules, where different components may maintain high and low response rates.

(e) *Data reporting and evaluation.* In addition to the reporting requirements specified under 40 CFR Part 792, Subpart J the final test report should contain the following information:

(1) *Description of system, test methods, experimental design, and control data.* (i) A description of the experimental chamber, programming equipment, data collection devices, and environmental conditions.

(ii) A description of the experimental design including counterbalancing procedures, and the stability criterion.

(iii) A description and statistical evaluation of positive control and other control data, including standard measures of central tendency, variability, coefficient of variation of response rates, and the slope of the dose-effect curve.

(2) *Results.* (i) Data for each animal should be arranged by test group in tabular form including the animal identification number, body weight, pre-exposure rate of responding, changes in responsa rate produced by the chemical, and group data for the same variables, including standard measures of central tendency, variability and coefficient of variation.

(ii) A description and statistical evaluation of the test results: With particular reference to the overall statistical procedures (e.g., parametric or nonparametric) dose-effect curve, and calculation of slope. Presentation of calculations is encouraged.

(f) *References.* For additional background information on this test guideline the following references should be consulted:

(1) Dews, P.B. "Assessing the Effects of Drugs." *Methods in Psychobiology.* Vol. 2, Ed., R.D. Myers (New York: Academic Press, 1972) 83–124.

(2) Ferster, C.B. Skinner, B.F. Schedules of Reinforcement. (New York: Appleton-Century-Crofts, 1957).

(3) Laties, V.G. "How Operant Conditioning can Contribute to Behavioral Toxicology." Environmental Health Perspectives, 28: 29–35 (1978).

(4) National Academy of Science. *Principles for Evaluating Chemicals in the Environment.* (Washington, DC: National Academy of Sciences, 1975).

(5) National Academy of Science. *Principles and Procedures for Evaluating the Toxicity of Household Substances.* (Washington, DC: National Academy of Sciences, 1977).

(6) National Academy of Science. "Strategies to determine needs and priorities for toxicity testing." Appendix 3B. *Reference Protocol Guidelines For Neurobehavioral Toxicity Tests.* 2: 123–129 (1982).

§ 798.6540 Acute delayed neurotoxicity of organophosphorus substances.

(a) *Purpose.* Organophosophorus substances should be considered as candidates for delayed neurotoxicity studies using the adult hen as the test animal. This test has certain limitations, e.g., in predicting effects from repeated exposures. These limitations may be minimized by conducting an adjunct test in which inhibition and aging of neurotoxic esterase of hen neural tissue are measured.

(b) *Definitions.* Acute delayed neurotoxicity is a prolonged, delayed-onset locomotor ataxia resulting from single administration of the test substance, repeated once if necessary.

(c) *Principle of the test method.* The test substance is administered orally in a single dose to domestic hens (Gallus gallus domesticus) which have been protected from acute cholinergic effects, when appropriate. The animals are observed for at least 21 days for delayed neurotoxicity, with redosing and observation for another 21 days if no effects or equivocal responses are seen. The animals are observed daily for behavioral abnormalities, locomotor ataxia and paralysis. Histopathological examination of selected neural tissues is undertaken on all animals surviving the initial cholinergic phases.

(d) *Test procedures*—(1) *Animal selection.* The adult domestic laying hen, aged 8 to 14 months, is recommended. Standard size breeds and strains should be employed.

(2) *Number of animals.* A sufficient number of hens should be utilized so that at least six survive the observation period.

(3) *Control groups*—(i) *General.* Appropriate control groups should be used. These should include a positive control group of at least two hens treated with a known delayed neurotoxicant and a concurrent control group of at least six hens treated in a manner identical to the treated group, except that administration of the test substance and any protective agents is omitted.

(ii) *Reference substances.* A substance which is known to produce acute delayed neurotoxicity should be used as a positive control. Examples of such substances are triorthocresyl phosphate (TOCP) and leptophos.

(4) *Housing and feeding conditions.* Cages or enclosures which are large enough to permit free mobility of the hens and easy observation of gait should be used. Where the lighting is artificial, the sequence should be 12 hours light, 12 hours dark. Appropriate diets should be administered as well as an unlimited supply of drinking water.

(5) *Dose level.* The selected dose level of the test substance should not be less than the unprotected LD_{50} dose. Atropine or another noninterfering protective agent may be used to prevent death due to acute cholinergic effects. Doses of test substances higher than 5000 mg/kg of body weight need not be tested.

(6) *Dose selection.* A preliminary LD_{50} test using an appropriate number of animals, dosages and dose groups, as recommended in § 798.1175, should be performed in unprotected hens to establish the dose level to be used in this test. Healthy young adult hens free from interfering viral diseases and medication and without abnormalities of gait should be acclimatized to the laboratory conditions for at least 5 days prior to randomization and assignment to treatment and control groups.

(7) *Route of administration.* Dosing with the test substance should normally be by the oral route using gavage, gelatine capsules, or a comparable method.

(8) *Study conduct*—(i) *General.* The test or control substance should be administered and observations begun. All hens should be carefully observed at least once daily for a period of at least 21 days and signs of toxicity recorded, including the time of onset, degree and duration. Observations should include, but not be limited to, behavioral abnormality, locomotor ataxia and paralysis. At least twice a week the hens should be taken outside the cages and subjected to a period of forced motor activity, such as ladder climbing, in order to enhance the observation of minimal responses. If neurotoxic responses are not observed or if equivocal responses are seen, then the dose should be administered again and the animals observed for an additional 21 days. The hens should be weighed weekly. Any moribund hens should be removed and sacrificed.

(ii) *Pathology*—(A) *Gross necropsy.* In the presence of clinical signs of delayed neurotoxicity useful information may be provided by gross necropsy.

(B) *Histopathology.* All animals should be subjected to microscopic examination. Tissues should be fixed *in situ*, preferably using perfusion techniques. Sections should include medulla oblongata, spinal cord and peripheral nerves. The spinal cord sections should be taken from the upper cervical bulb, the midthoracic and the lumbo-sacral regions. Section of the proximal region of the tibial nerve and its branches should be taken. Sections should be stained with appropriate myelin and axon-specific stains.

(e) *Data reporting and evaluation*—(1) *Test report.* In addition to the reporting requirements specified under 40 CFR Part 792, Subpart J the final test report must include the following information:

(i) Toxic response data by group with a description of clinical manifestations of nervous system damage; where a grading system is used the criteria should be defined.

(ii) For each animal, time of death during the study or whether it survived to termination.

(iii) The day of observation of each abnormal sign and its subsequent course.

(iv) Body weight data.

(v) Necropsy findings for each animal, when performed.

(vi) A detailed description of all histopathological findings.

(vii) Statistical treatment of results, where appropriate.

(2) *Treatment of results.* Data may be summarized in tabular form, showing for each test group the number of animals at the start of the test, the number of animals showing lesions or effects, the types of lesions or effects and the percentage of animals displaying each type of lesion or effect.

(3) *Evaluation of results.* The findings of an acute delayed neurotoxicity study should be evaluated in terms of the incidence and severity of neurotoxic effects and of any other observed effects and histopathological findings in the treated and control groups.

(f) *References.* For additional background information on this test guideline the following references should be consulted:

(1) Ankier, S.I. "New hot plate tests to quantify antinociceptic and narcotic antagonist activities," European Journal of Pharmacology *27*: 1–4 (1974).

(2) Coughenour, L.L. McLean, J.R., and Parker R.B. "A new device for the rapid measurement of impaired motor function in mice," Pharmacology, Biochemistry and Behavior *6*: 351–353 (1977).

(3) D'Amour, F.E. Smith, D.L. "A method for determining loss of pain sensation," *Journal of Pharmacology and Experimental Therapeutics, 72*: 74–79 (1941).

(4) Deuel, R.K." Determining sensory deficits in animals," *Methods in Psychobiology Ed.* R.D. Myers (New York: Academic Press, 1977) pp. 99–123.

(5) Edwards, P.M., Parker, V.H. "A simple sensitive and objective method for early assessment of acrylamide neuropathy in rats," *Toxicology and Applied Pharmacology 40*: 589–591 (1977).

(6) Evans, W.O. "A new technique for the investigation of some analgesic drugs on reflexive behavior in the rat," *Psychopharmacologia, 2*: 318–325 (1961).

(7) Irwin, S. "Comprehensive observational assessment: Ia. A systematic quantitative procedure for assessing the behavioral and physiologic state of the mouse," *Psychopharmacologia, 13*: 222–257 (1968).

(8) Marshall, J.F., Turner, B.H., Teitlbaum, P. "Sensory neglect produced by lateral hypothalamic damage," *Science, 174*: 523–525 (1971).

(9) Meyer, O.A. Tilson, H.A., Byrd, W.C., Riley, M.T. "A method for the routine assessment of fore- and hindlimb grip strength of rats and mice," Neurobehavioral Toxicology *1*: 233–236 (1979).

§ 798.6560 Subchronic delayed neurotoxicity of organophosphorus substances.

(a) *Purpose.* In the assessment and evaluation of the toxic characteristics of organophosphorus substances the determination of subchronic delayed neurotoxicity may be carried out, usually after initial information on delayed neurotoxicity has been obtained by acute testing or by the demonstration of inhibition and aging of neurotoxic esterase in hen neural tissue. The subchronic delayed neurotoxicity test provides information on possible health hazards likely to arise from repeated exposures over a limited period of time. It will provide information on dose response and can provide an estimate of a non-effect level which can be of use for establishing safety criteria for exposure.

(b) *Definitions.* Subchronic delayed neurotoxicity is a prolonged, delayed-onset locomoter ataxia resulting from repeated daily administration of the test substance.

(c) *Principle of the test method.* Multiple dose levels of the test substance are administered orally to domestic hens *(Gallus gallus domesticus)* for 90 days. The animals are observed at least daily for behavioral abnormalities, locomotor ataxia and paralysis. Histopathological examination of selected neural tissues is undertaken at the termination of the test period.

(d) *Test procedures*—(1) *Animal selection.* The adult domestic laying hen. aged 8 to 14 months. is recommended. Standard size breeds and strains should be employed.

(2) *Number of animals.* Ten hens should be used for each treatment and control group.

(3) *Control group*—(i) *General.* A concurrent control group should be used. This group should be treated in a manner identical to the treated group. except that administration of the test substance is omitted.

(ii) *Reference substances.* If a positive control is used. a substance which is known to produce delayed neurotoxicity should be employed. Examples of such substances are triorthocresyl phosphate (TOCP) and leptophos.

(4) *Housing and feeding conditions.* Cages or enclosures which are large enough to permit free mobility of the hens and easy observation of gait should be used. Where the lighting is artificial. the sequence should be 12 hours light. 12 hours dark. Appropriate diets should be administered as well as an unlimited supply of drinking water.

(5) *Dose levels.* At least three dose levels should be used in addition to the control group(s). The highest dose level should result in toxic effects. preferably delayed neurotoxicity. but not produce an incidence of fatalities which would prevent a meaningful evaluation. The lowest dose level should not produce any evidence of toxicity.

(6) *Route of administration.* Oral dosing each day for at least 5 days per week should be carried out. preferably by gavage or administration of gelatine capsules.

(7) *Study conduct*—(i) *General.* Healthy young adult hens free from interfering viral diseases and medication and without abnormalities of gait should be acclimatized to the laboratory conditions for at least 5 days prior to randomization and assignment to treatment and control groups. The test or control substance should be administered and observations begun. All hens should be carefully observed at least once daily throughout the test period. Signs of toxicity should be recorded. including the time of onset. degree and duration. Observations should include. but not be limited to. behavioral abnormality. locomotor ataxia and paralysis. At least once a week the hens should be taken outside the cages and subjected to a period of forced motor activity. such as ladder climbing. in order to enhance the observation of minimal responses. The hens should be weighed weekly. Any moribund hens should be removed and sacrificed.

(ii) *Pathology*—(A) *Gross necropsy.* In the presence of clinical signs of delayed neurotoxicity useful information may be provided by gross necropsy.

(B) *Histopathology.* Tissues from all animals should be fixed *in situ.* using perfusion techniques. Sections should include medulla oblongata. spinal cord and peripheral nerves. The spinal cord sections should be taken from the upper cervical bulb. the mid-thoracic and lumbosacral regions. Sections of the proximal region of the tibial nerve and its branches and of the sciatic nerve should be taken. Sections should be stained with appropriate myelin and axon-specific stains. Microscopic examination should be carried out on all hens in the control and high-dose groups. Microscopic examination should also be carried out on hens in the low and intermediate dose groups when there is evidence of effects in the high-dose group.

(e) *Data reporting and evaluation*—(1) *Test report.* In addition to the reporting requirements specified under 40 CFR Part 792. Subpart J the final test report must include the following information:

(i) Toxic response data by group with a description of clinical manifestations of nervous system damage; where a grading system is used the criteria should be defined.

(ii) For each animal. time of death during the study or whether it survived to termination.

(iii) The day of observation of each abnormal sign and its subsequent course.

(iv) Body weight data.

(v) Necropsy findings for each animal. when performed.

(vi) A detailed description of all histopathological findings.

(vii) Statistical treatment of results. where appropriate.

(2) *Treatment of results.* (i) Data may be summarized in tabular form. showing for each test group the number of animals at the start of the test. the number of animals showing lesions or effects. the types of lesions or effects and the percentage of animals displaying each type of lesion or effect.

(ii) All observed results should be evaluated by an appropriate statistical method. Any generally accepted statistical method may be used; the statistical methods should be selected during the design of the study.

(3) *Evaluation of results.* The findings of a subchronic delayed neurotoxicity study should be evaluated in conjunction with the findings of preceding studies and considered in terms of the incidence and severity of observed neurotoxic effects and any other observed effects and histopathological findings in the treated and control groups. A properly conducted subchronic test should provide a satisfactory estimation of a no-effect level based on lack of clinical signs and histopathological changes.

(f) *References.* For additional background information on this test guideline the following references should be consulted:

(1) Abou-Donia. M.B. "Organophosphorus ester-induced delayed neurotoxicity" Annual Review of Pharmacology and Toxicology. 21:511–548 (1981).

(2) Abou-Donia. M.B.. Pressing. S.H. "Delayed neurotoxicity from continuous low-dose oral administration of leptophos to hens." *Toxicology and Applied Pharmacology.* 38:595–608 (1976).

(3) Baron. R.L. (ed). "Pesticide Induced Delayed Neurotoxicity." Proceedings of a Conference. February 19–20. 1976. Washington. D.C. U.S. Environmental Protection Agency. EPA Report No. 600/1–76–025. Washington. DC (1976).

(4) Cavanaugh. J.B. "Peripheral neuropathy caused by chemical agents" *Critical Reviews of Toxicity.* 2:365–417 CRC Press. Inc. (1973).

(5) Johannsen. F.R.. Wright. P.L.. Gordon. D.E.. Levinskas. G.L.. Radue. R.W.. Graham. P.R. "Evaluation of delayed neurotoxicity and dose-response relationship of phosphate esters in the adult hen." *Toxicology and Applied Pharmacology.* 41:291–304 (1977).

(6) Johnson. M.K. "Organophosphorus esters causing delayed neurotoxic effects: mechanism of action and structure/activity studies." *Archives of Toxicology.* 34:259–288 (1975).

§ 798.6850 **Peripheral nerve function.**

(a) *Purpose.* The techniques in this guideline are designed to develop data on neurophysiological changes in the nervous system for chemical substances and mixtures subject to such testing under the Toxic Substances Control Act. The data will characterize the neurophysiological changes produced by substances known to be peripheral neurotoxicants and determine dose-effect. The EPA will use these data to assess the risk of neurotoxic effects these chemicals may present to human health.

(b) *Definitions.* (1) Neurotoxicity or a neurotoxic effect is an adverse change in the structure or function of the nervous system following exposure to a chemical agent.

(2) Conduction velocity is the speed at which the compound nerve action potential traverses a nerve.

(3) Amplitude is the voltage excursion recorded during the process of recording the compound nerve action potential. It is an indirect measure of the number of axons firing.

(c) *Principle of the test method.* The test substance is administered to several groups of experimental animals, one dose being used per group. The peripheral nerve conduction velocity and amplitude are assessed using electrophysiological techniques. A dose-effect function is determined.

(d) *Test procedure*—(1) *Animal selection*—(i) *Species and strain.* Testing should be performed on a laboratory rodent unless such factors as the comparative metabolism of the chemical or species sensitivity to the toxic effects of the test substance, as evidenced by the results of other studies, dictate otherwise. All animals should have been laboratory-reared to ensure consistency of diet and environmental conditions across groups and should be of the same strain and from the same supplier. If this is not possible, groups shall be balanced to ensure that differences are not systematically related to treatment.

(ii) *Age and weight.* Young adult animals (at least 60 days for rats) must be used. Age (± 15 days for rats) must not vary across groups. Weights should be within ± 10 percent of the mean.

(iii) *Sex.* Either (or both) sex(es) may be used. Sex must not vary across groups.

(2) *Number of animals.* Sufficient numbers of animals shall be used to detect a 10 percent change from normal conduction velocity at the 5 percent level with 90 percent power. Generally, 20 animals/group will satisfy this requirement.

(3) *Control groups.* (i) A concurrent control group is required. This group must be an untreated group, or, if a vehicle is used in administering the test substance, a vehicle control group. If the toxic properties of the vehicle are not known or cannot be made available, both untreated and vehicle control groups are required.

(ii) A satellite group may be treated with the high dose level for 90 days and observed for reversibility, persistence, or delayed occurrence of toxic effects for a post-treatment period of appropriate length, normally not less than 28 days.

(4) *Dose levels and dose selection.* At least 3 doses, equally spaced on a log scale (e.g., ½ log units) over a range of at least 1 log unit shall be used in addition to a zero dose or vehicle administration. The data should be sufficient to produce a dose-effect curve.

(i) The highest dose shall produce (A) clear effects on nerve conduction velocity and/or amplitude or (B) life-threatening toxicity.

(ii) The data from the lower doses must show either (A) graded dose-dependent effects at two dose levels or (B) no effects at two dose levels, respectively.

(5) *Duration of testing.* The exposure duration will be specified in the test rule. This will generally be 90 days of exposure.

(6) *Route of administration.* The test substance shall be administered by a route specified in the test rule. This will usually be the route most closely approximating the route of human exposure. The exposure protocol shall conform to that outlined in the appropriate acute or subchronic toxicity guideline.

(7) *Combined protocol.* The test described herein may be combined with any other toxicity study, as long as none of the requirements of either are violated by the combination.

(8) *Study conduct*—(i) *Choice of nerve(s).* The nerve conduction velocity test must separately assess the properties of both sensory and motor nerve axons. Either a hind limb (e.g., tibial) or tail (e.g., ventral caudal) nerve must be chosen. Response amplitude may be measured in a mixed nerve.

(ii) *Preparation.* (A) *In vivo* testing of anesthetized animals is required. A barbiturate anesthetic is appropriate. Care should be taken to ensure that all animals are administered an equivalent dosage and that the dosage is not excessive. If dissection is used, extreme caution must be observed to avoid damage to either the nerve or the immediate vascular supply.

(B) Both core and nerve temperature must be monitored and kept constant (±0.5 °C) during the study. Monitoring of skin temperature is adequate if it can be demonstrated that the skin temperature reflects the nerve temperature in the preparation under use. Skin temperature should be monitored with a needle thermistor at a constant site, the midpoint of the nerve segment to be tested.

(C) *Electrodes*—(*1*) *Choice of Electrodes.* Electrodes stimulation and recording may be made of any conventional electrode material, such as stainless steel, although electrodes for non-polarizing materials are preferable. If surface electrodes are used, care must be taken to ensure that good electrical contact is achieved between the electrode and the tissue surface. Following each application, any electrode must be throughly cleaned.

(*2*) *Electrode placement.* Electrode placement must be constant with respect to anatomical landmarks across animals (e.g., a fixed number of mm from the base of the tail). Distances between electrodes used to calculate conduction velocity must be measurable to ±0.5 mm. The recording electrodes should be as far from the stimulating electrodes as possible. A 40 mm separation is adequate in the caudal tail nerve of the rat.

(*3*) *Recording conditions.* The animal should be grounded at about the midpoint between the nearest stimulating and recording electrodes. The recording conditions must be such that the stimulus artifact has returned to baseline before any neural response is recorded which is used in the analysis, under condition of maximal band width of the preamplifier.

(D) The electrical stimulator must be isolated from ground. Biphasic or balanced pair stimuli to reduce polarization effects are acceptable. A constant current stimulator is preferred (and required for polarizable electrodes) and should operate from about 10 uA to about 10 mA. If a constant voltage stimulator is used, it should operate to 250V. All equipment shall be calibrated with respect to time, voltage, and temperature.

(E) The recording environment should be enclosed in a Faraday cage unless electromagnetic field pick-up can be shown to be more than 1.5 times the amplifier baseline noise, under recording conditions. The recording output should be amplified sufficiently to render the compound action potential easily measurable with an oscilloscope. The amplifier should pass signals between 2.0 Hz and 4 kHz without more than a 3dB decrement. The preamplifier must be capacitatively coupled or, if direct coupled to the first stages, must be able to tolerate any DC potentials which the electrode-preparation interface produces, and to operate without significant current leakage through the recording electrodes.

(F) A hard copy must be available for all waveforms or averaged waveforms from which measurements are derived, and for all control recording required by this standard. Hard copies must include a time and voltage calibration signal.

(iii) *Procedure*—(A) *General.* Stimulation should occur at inter-stimulus interval significantly below the relative refractory period for the nerve under study. Stimulus intensity should be increased gradually until the response amplitude no longer increases. At this point the "maximal" stimulus current is determined. An intensity 25–

50 percent (a fixed value in a given study) above the maximal intensity so determined should be used for determining response peak latency and response amplitude. Response peak latency may be read off the oscilloscope following single sweeps or determined by an average of a fixed number of responses. The baseline-to-peak height technique (Daube, 1980) is acceptable for determination of the nerve compound action potential amplitude. but in this case, at least 16 responses must be averaged.

(B) *Motor nerve.* Motor conduction velocity may be measured from a mixed nerve by recording the muscle action potential which follows the compound action potential of the nerve. The stimulus intensity is adjusted so that the amplitude of the muscle action potential is supramaximal. Measurement of the latency from stimulation to the onset of the compound muscle action potential gives a measure of the conduction time of the motor nerve fibers. To calculate the conduction velocity, the nerve must be stimulated sequentially in two places each with the same cathode-anode distance. and with the cathode located toward the recording electrode. The cathode to cathode distance between the two sets of stimulating electrodes is divided by the difference between the two latencies of muscle action potential in order to obtain conduction velocity. Placement of electrodes shall be described-site of nerve stimulation may differ from point of entry through skin.

(C) *Sensory nerve.* The somatosensory evoked potential may be used to determine the sensory nerve conduction velocity in a mixed nerve. The cathode is placed proximally at the two stimulation locations with the same cathode-anode distances. The recording electrodes are placed on the skull. The conduction velocity is calculated by dividing the distance between the two stimulating cathodes by the difference between the two latencies of the largest primary peak of the somatosensory evoked potential. Between 64 and 128 responses should be averaged. The stimulation frequency should be about 0.5 Hz. Stimulus intensity should be the same as that used for determining the motor conduction velocity. Should the peak of the somatosensory response be so broad that it cannot be replicated with an accuracy of less than 5 percent of the latency difference observed. then a point on the rising phase of the potential should be chosen. e.g. at a voltage 50 percent of the peak voltage. Alternatively, the sensory nerve conduction velocity can be obtained from a purely sensory nerve or from stimulation of the dorsal rootlets of a mixed nerve. using two recording electrode pairs.

(e) *Data collection. reporting and evaluation.* In addition to information meeting the requirements stated under 40 CFR Part 792. Subpart J. the following specific information should be reported:

(1) *Description of test system and test methods.* (i) Positive control data from the laboratory performing the test which demonstrate the sensitivity of the procedure being used.

(ii) Hard copies of waveforms from which measurements were made as well as control recordings.

(iii) Voltage and time calibration referable to the standards of the Bureau of Standards or to other standards of accuracy sufficient for the measurements used.

(iv) Data demonstrating that nerve temperature was maintained constant throughout the recording period.

(2) *Results.* The following information must be arranged by test group (dose level):

(i) In tabular form. data must be provided showing for each animal:

(A) Its identification number.

(B) Body weight. nerve conduction velocity. and amplitude.

(ii) Group summary data should also be reported.

(3) *Evaluation of data.* An evaluation of the test results (including their statistical analysis) must be made and supplied. This submission must include dose-effect curves for conduction velocity and amplitude and a description of statistical methods. Deviation from conventional parametric techniques must be justified.

(f) *References.* For additional background information on this test guidline the following references should be consulted:

(1) Aminoff. M.J. (Ed). *Electrodiagnosis in Clinical Neurology.* (New York: Churchill Livingstone. 1980).

(2) Daube. J. "Nerve Conduction Studies." *Electrodiagnosis in Clinical Neurology.* Ed. M.J. Aminoff (New York: Churchill Livingstone. 1980). pp. 229–264.

(3) Glatt. A.F.. H.N. Talaat and W.P. Koella "Testing of peripheral nerve function in chronic experiments in rats." *Pharmacology and Therapeutics.* 5:539-534 (1979).

(4) Johnson. E.W. *Practical Electromyography.* (Baltimore: Williams and Wilkins. 1980).

Subpart H—Special Studies

§ 798.7100 Metabolism.

(a) *Purpose.* (1) Data from studies on the absorption. distribution. excretion and metabolism of a test chemical are desirable to aid in the evaluation of test results from other toxicology studies and in the extrapolation of data from animals to man. Such studies should be done on each chemical of toxicological concern. The concern may be predicated on the level and type of toxicity observed (or anticipated) and by the magnitude of potential human exposure to the chemical. The main purpose of metabolism studies is to produce data which fortify the understanding of the safety of the chemical in consideration of its intended uses and anticipated human exposure. In addition to the general reasons stated above. a metabolism study may be performed for the following purposes:

(i) To determine the amount and rate of absorption of the test chemical at different dose levels.

(ii) To determine the pattern of distribution of the test chemical among tissues. organs and fluid compartments at different dose levels. after single and repeated doses.

(iii) To identify and. to the extent possible. quantify significant metabolites.

(iv) To characterize route(s) and rate(s) of excretion.

(v) To determine any possible bioaccumulation (bioretention) of the test substance and/or metabolites.

(vi) To determine absorption. metabolism. excretion and distribution as a function of single or repeated doses. For certain chemicals. metabolism studies may not adequately define all of these.

(b) *Definitions.* Bioaccumulation (bioretention) is the uptake and. at least temporary. storage of a chemical by an exposed animal. The chemical can be retained in its original form and/or as modified by enzymatic and non-enzymatic reactions in the body.

(c) *Test procedures*—(1) *Animal selection*—(i) *Species.* The preferred species is the rat. If another mammalian species is used. the tester should provide justification/reasoning for its selection. Commonly used laboratory strains should be employed. Preliminary studies may be performed in several species to develop information on comparative metabolism. Information derived from preliminary studies may help in the selection of species for subsequent toxicity tests.

(ii) *Age.* Young adult animals should be used. For specific purposes, a comparative study using very young animals may provide information about the effects of age on metabolism.

(iii) *Sex.* (A) Equal numbers of animals of each sex should be used at each dose level.

WEDNESDAY, APRIL 16, 1986.

AQUACULTURE CENTERS

WITNESSES

DR. ROSS HEATH, DEAN, COLLEGE OF OCEAN AND FISHERY SCIENCES, UNIVERSITY OF WASHINGTON

DR. PHILIP HELFRICH, DIRECTOR, HAWAII INSTITUTE OF MARINE BIOLOGY, UNIVERSITY OF HAWAII

DR. HENRY PARKER, SOUTHEASTERN MASSACHUSETTS UNIVERSITY AND AD HOC STEERING COMMITTEE FOR NEW ENGLAND AQUACULTURE

DR. TOM McILLWAINE, ASSOCIATE DIRECTOR, GULF COAST RESEARCH LAB, OCEAN SPRINGS, MISSISSIPPI

Mr. AKAKA. I would like to call a panel forward, the panel on aquaculture. Thank you very much for testifying before the Subcommittee on Agriculture. I welcome you here. We look forward to your testimony. I want to tell you that we will include the full text of your testimony in the record. You may proceed any way you want to.

Dr. HEATH. I'm Dr. Ross Heath, Dean of the College of Ocean and Fishery Sciences and the University of Washington. With me at the witness table are Dr. Tom McIllwaine, Associate Director of the Gulf Coast Research Lab who is appearing on behalf of Dr. Rodney Foil of the Mississippi Agriculture and Forestry Experiment Station. Dr. Foil could not be with us today, but he has a statement to submit for the record. Dr. Henry Parker of Southeastern Massachusetts University, who also represents the Ad Hoc Steering Committee for New England Aquaculture. And Dr. Philip Helfrich, Director of the Hawaii Institute of Marine Biology, the University of Hawaii.

Also in the audience today are the following representatives from other organizations involved in aquaculture research and production: Mr. Gary Glenn, project director of the Marine Sciences Center of Excellence, State of Massachusetts; Mr. Brian Tarbox, President of the Maine Aquaculture Association; Dr. Charles Sedgwick, Director of the Tufts University Wildlife Clinic; Dr. Jack Davidson, Director of the University of Hawaii Seagrant Program; Mr. Phil Mackey of the of the Mount Lassen Trout Farms of California, who's presently chairman of the research committee of the United States Trout Association and formerly president of that organization. These gentlemen also have statements which they will submit for the record.

Mr. Chairman, thank you for the opportunity to comment on the aquaculture provisions of the Food Security Act of 1985. Dr. John Byrne, the President of Oregon State University had hoped to make the remarks that I will make but regrets his inability to be here today.

My comments reflect discussions between the University of Alaska, the University of California at Davis, the University of Idaho, Oregon State University, the University of Washington, and Washington State University.

Our consortium represents the collective aquaculture research and development interests of the five Pacific Northwest states.

My specific message is to express the concern of our member institutions about the status of aquaculture in the U. S. and in our region. We encourage your support for Subtitle L of Title XIV of the Food Security Act of 1985. We are especially concerned about the growing dependence of this country on imported seafood products at the expense of domestic production.

Americans have learned that seafood is good for them and are consuming greater and greater amounts each year. Yet most of our domestic wildstock fishery resources are either overexploited or already harvested at optimum sustainable yield.

We must find alternate sources of fishery products. Because we now seem content to rely on imports to satisfy the increasing demand, however, our trade deficit in fish and fishery products hovers around the $6 billion per year level.

We are also disappointed by our inability to capitalize on the opportunities to create new employment through aquaculture. Producers need assistance in the form of regional and national research, development, and extension programs if they are to reach their production potential.

The National Aquaculture Act of 1980 was enacted to stimulate aquaculture production in the United States. Unfortunately the provisions of the act, its 1984 extension, and the Food Security Act of 1985 have never been implemented with appropriated funds; aquaculture is an important, well established activity in the western United States. Most of the rainbow trout produced in the U. S. are produced in our region. Rainbow trout production is second only to catfish among farm raised fish in the U. S.

In addition, our commercial and recreational salmon fisheries are highly dependent upon aquaculture for their continued existence. For example, over 80 percent of the silver salmon landed in the Pacific Northwest result from aquaculture in the form of public and private hatcheries. Virtually all the oysters and an increasing proportion of the clams produced on the west coast are cultured, and there is an increasing production of other species, such as catfish, sturgeon, and striped bass.

Although present levels of production are encouraging, production could be increased substantially if the technological and institutional constraints that limit production efficiency and further expansion were eliminated. Research in physical, biological, and social sciences is needed to relieve these constraints.

We believe that by harnassing the research and development and extension capabilities of land grant and sea grant colleges we can address these needs. We believe also that the inclusion of private industry, state and federal agencies, and other academic institutions is essential to maximize the benefits from aquaculture research, development and demonstration activities.

Unfortunately, however, no mechanism for funding these coordinated activities exists at the present time. Mr. Chairman, the provisions of Subtitle L of Title XIV of the Food Security Act of 1985 could be the catalyst that allows U. S. aquaculture to realize its full potential. We strongly urge your subcommittee to support the implementation of Title XIV.

I would like to introduce now Dr. Tom McIllwaine who will speak for the southern element.

Dr. McILLWAINE. Thank you, Mr. Chairman. As already mentioned, Dr. Rodney Foil was to have been here today and he could not make it. So he asked me to appear here on behalf of him to speak on their support of Subtitle L aquaculture centers. Dr. Foil informs me that the representatives from the southern states have caucused and met and they are in agreement that the aquaculture centers will support and speed the development of aquaculture in the southeast. I think we have an outstanding example of what aquaculture can do in the southeast with our catfish industry down there.

Therefore, they are in favor of this legislation. Dr. Foil has submitted his testimony for the record and it will be forwarded to the subcommittee. Thank you, Mr. Chairman, for the opportunity to appear here today. If you will excuse me, I have to catch a plane back to Mississippi.

Mr. AKAKA. Thank you for coming. Thank you for your testimony.

Dr. HEATH. Our next speaker is Dr. Henry Parker from Southeastern Massachusetts who will speak for New England.

Dr. PARKER. Mr. Chairman, thank you very much for the opportunity to provide testimony on behalf of the New England area. I speak for the Ad Hoc Steering Committee for New England Aquaculture.

We are very strongly supportive of the aquaculture provisions of the Food Security Act of 1985 and in particular Subtitle L. We are united in this support because we feel that the provisions of the proposed legislation would do a great deal to stimulate and promote the aquaculture industry. I have supplied some written testimony on behalf of the Ad Hoc Steering Committee, but I would like to just take a few moments here to focus on how we in New England feel that the proposed legislation would benefit the aquaculture industry in general.

First, the seven institutions represented by our committee and the other New England marine institutions that have been involved in research and development activities would be able to work very closely with industry to identify the critical problems that confront the industry and to develop inter-institutional programs of targeted and focused research.

We think the key thing that this legislation would provide is an opportunity for the institutions to work together in concert with industry on problems identified by the industry. There are many problems. In our own region alone we are confronted with problems every day that are expressed by the industry.

To give you a couple of examples, very recently a successful oyster cultivation program on Cape Cod essentially had to go out of business because of a disease problem. They had been afflicted with the parasitic shellfish disease, MSX for the first time in New England history this has occurred.

It is a disease that has been evident in the mid-Atlantic states for some years, but the grower is essentially having to shut down and desperately needs a program of targeted research that would help resolve the MSX disease problem and prevent it in the future.

This is not a problem that one institution can resolve alone, and it is not a problem that a single academic effort could address. It has to be a cooperative effort between institutions working closely with the industry.

Another example: there is another successful shellfish grower on Cape Cod who is very anxious to expand the shellfish cultivation program. He does not know whether the water body in which he is growing the shellfish will support an expanded production. He does not have the resources or the expertise within his company to address that problem.

A coordinated program undertaken by a number of different institutions in the New England region could help him answer the questions that he needs to have answered before he can expand his production.

A couple of other points that I would like to make where I think this proposed legislation can be very helpful: there are some other critical areas in research and also in education that need to be addressed to promote the aquaculture industry. We in New England as well as in other parts of the country have a major problem with public perceptions of aquaculture and it is essentially a problem of inadequate knowledge of what this industry is all about.

We need a coordinated, inter-institutional program of public education to advise the citizenry as to the benefits of aquaculture. Again, this proposed legislation would allow for that cooperative approach.

Finally, the aquaculture industry in general is in vital need of scaled up pilot and demonstration projects which can take the laboratory technologies which have been well developed and apply them to a larger program in the field before they are actually put into commercial application. Again, the proposed legislation would give the resources or provide the resources so that institutions could work together with the industry to develop these integrated field projects which would allow testing of the laboratory technologies.

Mr. Chairman, this concludes my remarks. I appreciate the opportunity to present them. I would like to turn the floor over now to Dr. Philip Helfrich who is the Director of the University of Hawaii Institute of Marine Biology. Thank you.

Dr. HELFRICH. Mr. Chairman, I represent a group of colleagues in the public and private section in Hawaii with a strong commitment to aquaculture. We thank you for this opportunity to address you on this important legislation. Aquaculture is playing an increasingly important role in the national agriculture economy as evidenced by many agencies involved in aquaculture research and demonstration; aquaculture is emerging as a vital national industry as well as a means to redress the fisheries trade deficit. Aquaculture has the potential to meet the American consumer's increased demand for aquatic products and the potential to contribute substantially to the domestic economy and our nutritional needs.

I submit that we can best fulfill aquaculture's economic potential through implementation of Subtitle L. In particular I address the national benefits that will result from establishing aquaculture centers. A general advantage of aquaculture centers is they would be mechanisms for integrating the expertise and support of the myriad agencies, educational institutions and private organizations dedicated to research, development, and training in aquaculture. Programs from each of these sectors may be of extremely high quality, but must be coordinated before they can identify the strengths and weaknesses and future directions of aquaculture technology.

By establishing these centers, we can have the considerable scientific resources of the nation as a whole moving forward in a planned and coordinated manner. As you know, Mr. Chairman, the state of Hawaii has long recognized that aquaculture is an environmentally sound complement to diversified agriculture and has given it high priority in the state development plans. In fact, Hawaii was the first state to prepare a comprehensive aquaculture development plan.

The importance of involving the private sector cannot be overstated. So when my colleagues and I established an ad hoc aquaculture group, our first priority was coordinating the public and private sectors. It is our belief that the development of aquaculture centers provided for by Subtitle L should reflect a similar mix of private and public expertise; including public and private organizations in the centers ensures that the knowledge created through research is extended to practical applications.

The continued high level of interest in aquaculture in Hawaii has resulted in an impressive level of expertise available over the last decade as scientific and technological infrastructure has emerged from significant progress made in aquaculture technology and development.

Coordinating these research efforts under the aegis of a center for aquaculture will concentrate all our expertise on eliminating the remaining economic and technological constraints to commercial production and on developing large scale, profitable aquaculture.

There are distinct advantages to establishing an aquaculture center in the tropics in addition to the obvious benefits accrued to Hawaii, Puerto Rico, the Virgin Islands, and other U. S. tropical territories. There is an increasing interest in the culture of subtropical species such as talapia and marine shrimp in the temperate zone in the U. S. An aquaculture center in the tropics would permit year round research and development of such species with the results being passed on to our colleagues throughout the U. S. through other aquaculture centers.

In addition, the maintenance of brood stock as well as genetic improvements to these stocks can better be accomplished in the tropics with favorable year round growing conditions. For example, we can get three crops a year of some marine shrimp versus a single crop in the temperate zone. Therefore, aquaculture in the tropics not only is advantageous from the production standpoint but also from the perspective of research accomplishments in the naitonal interest.

Mr. Chairman, I respectfully submit that we should not continue to rely on diminishing fisheries nor increasing U. S. trade deficits for fish and shellfish. We should not continue to count on aquacultural industries being built on scattered and uncoordinated research efforts. We should not continue to believe that economic benefit can accrue to a business without an adequate supply of trained personnel. We should not expect to be of service to lesser developed countries without establishing a solid base in our own country.

Most of all, we should not continue to expect old methods to yield new results. If aquaculture is to continue its present growth, we must have a means of coordinating aquacultural knowledge both in the public and private sectors. It is our belief that Subtitle L of Title XVI of the farm bill can be the means to accomplish this, and I request your support.

Mr. Chairman, on behalf of our group I would like to thank you for the opportunity to discuss this important issue and my personal mahalo. I would be happy to entertain questions.

Mr. **Akaka**. Thank you very much, Dr. Helfrich, Dr. Heath, and Dr. Parker. It is certainly good to see all of you speak on a subject that is close to my heart. I am particularly happy to see so many representatives and also to see other testimony here from colleagues that are not present in support of funding for aquaculture centers. I am also happy that the Food Security Act does not contain provisions for aquaculture centers and authorizes them in Subtitle L.

I am happy, too, because Hawaii is one of the laboratories for this, as other places you mentioned, and it is great to see other states as interested. I did visit the facilities up in the northeast to see what they are doing there. And I was very, very impressed, and we have testimony here from that section of the country.

But I want you to know that as a subcommittee member, you may be certain that I will do everything in my power to make this concept a reality. As was mentioned, too, we are facing a rough time and Gramm-Rudman is requiring us to reduce the deficit, which we have to do and we need to do. But even in spite of that we need to see how we can move in such areas as this to assure more proteins for not only our country but for the rest of the world.

It is very important, and when you think by the turn of the century we may be doubling the population on earth and I have even heard it going as high as 11 billion. And when you think of more than 4 billion on earth today and the difficulty we have in trying to produce and supply the necessary protein for people, you know we will be in trouble if we do not improve it.

You are certainly offering one of those options to the Congress, and I wanted you to know where I stand on that. I have just a couple or three questions I would like to ask and have any one of you answer. I am concerned when I mention the deficit. I am also concerned about trade imbalance in aquaculture products. I think one of you mentioned that.

My question is how could that imbalance be changed and what difference would it make if Congress provided the funding for aquaculture centers? Would this make a difference?

Dr. **Heath**. I will take a shot at that one. I think there are several ways in which some resources would make a difference. I think the U. S. has always thrived in the world on the basis of new technology. We seem to have the imagination and the internal structure that allows us to do it. And so I think by application of this new technology in areas like biotechnology that we can sort of leapfrog some of the rest of the world that is now ahead of us.

There are some small examples happening, for example. I think late this year or next year you will begin to see coming on the market something that is called a four season or an all season oyster, and it is an oyster which has been genetically manipulated so that it does not become sexually mature. So its flesh stays attractive throughout the year. It is going to open up a big market both nationally and beyond.

I think secondly we need to produce species that we are presently importing. There is a huge and growing market in the U. S. for Atlantic salmon. Right now these are coming from primarily Scandinavia or Norway. There is no reason they cannot be produced in this country. There are some issues of nutrition, and so forth, that have to be solved. This is the kind of area where we can make big steps.

I think also we should be aggressive and go after some of the markets overseas that we are now not reacting to. I think it is clear that we can produce things like surimi and nori in this country very effectively, and there is an enormous market for these products in Japan. I think we should be not just sort of trying to defend our own markets, but we should be going out and aggressively trying to develop new markets in the world, and there is no reason with the skills that we have that we should not be able to do that.

So I think right now we're running about probably a $6 billion a year deficit, and I think that should be turned around.

Mr. **Akaka**. Any further remarks by the panel?

Dr. **Helfrich**. I would only say that marine shrimp is another item that we import large quantities of and we have the potential to produce them domestically and we are going to have to be extremely competitive, however in that some countries of Asia and South America can produce them at much lower costs, and, therefore, we have to sharpen our technology in order to compete with them. But I think we can, and it is only through research, such as some that is now going on and other that is being proposed, that we can do that. I am confident we can.

Mr. **Akaka**. Thank you, Dr. Heath and Dr. Helfrich. My next question is about the full potential. As you stated, if we are able to produce all of this and do research and development we can certainly lower the imbalance, the trade imbalance.

But my question is on achieving the full potential production of aquaculture in our country. Do you believe that these aquaculture centers would, if they were established, make a difference? Dr. Parker?

Dr. **Parker**. I certainly do, Mr. Chairman. I think that we have enormous mental resources, I guess you could call them in this country. We have a tremendous amount of expertise in the various research institutions. Up until now there has been no coordinated program to bring those resources together to resolve the problems, the many problems that aquaculture faces.

And I think one of the most important advantages or effects of this legislation would be to provide a coordinated research program between institutions, which would really address the industry problems.

And with the Leadership provided by the U. S. Department of Agriculture and the resources in this legislation I think you can get that coordinated approach. There are a number of things that the coordinated research and even educational approach could achieve. Number one, what are the problems in the industry? We are not talking well enough with the industry right now. But this would provide the incentives to talk better with the industry, to listen to them, and to address those problems.

Secondly, I mentioned earlier programs of public education. I think we share throughout this country a major problem in educating the public as to the benefits of aquaculture; with a coordinated, inter-institutional program, I think we can provide the education to the public to overcome some of the obstacles that the public currently presents.

I also had mentioned earlier pilot and demonstration projects. It is very difficult to extrapolate laboratory results to commercial reality. There needs to be an intermediate step and it is generally a rather expensive one and one that cannot be done by a single institution to test on a larger scale the laboratory successes to see if in fact they may become commercially viable. So again I think this is a way we can achieve it.

I think if we do provide a coordinated approach to this that we can achieve growth rates in aquaculture that are currently evident in other parts of the world.

Mr. AKAKA. Thank you very much for your statement on coordinating activities. I would like to go into another question this will certainly be bringing another sector into this.

The question is what role will the private sector play in this initiative?

Dr. HEATH. We have representatives, Mssrs. Mackey and Tarbox. Perhaps they should come up and speak if that would be okay.

Mr. AKAKA. We welcome their testimony. Will you state your name and who you represent before you speak.

Mr. MACKEY. Thank you, Mr. Chairman. My name is Phil Mackey. I am currently past president of the U. S. Trout Farmers Association and chairman of that association representing private industry.

Private industry must play a major role in this initiative. We clearly understand and support the purpose of Subtitle L. We recognize that we are a rapidly growing industry who has technological needs. We also recognize that we are organized very well and from the standpoint of being able to address those specific needs in communication. We feel very strongly about this and, as I said, support it quite favorably.

We also are very anxious to become involved in the highly successful of the USDA which deals primarily with the aquaculture experiment stations and cooperative extension. That has been demonstrated to be successful in working in our area of California, and once again has provided the United States with its expertise in agriculture.

The area of concern of private industry is the relevance of research. The one point that I would like to make above all else is that private industry must have a major decision making factor influencing the relevance of the research projects that would be undertaken.

If nothing else is gleaned from my testimony, this is the clear voice of industry. We know the academic world has tremendous potential to help us. There is a lot of room for improvement in communications on both sides of the fense. We recognize that it is going to be a major commitment from industry from the standpoint of financial commitment in dollars, in time and facilities, and we are very willing to make that commitment.

So private industry clearly supports the purpose of Subtitle L.

Mr. **Akaka**. Thank you. I certainly appreciate that testimony.

Mr. **Tarbox**. Mr. Chairman, my name is Brian Tarbox. I am President of the Maine Aquaculture Association. Before I came here I had a number of meetings with my board of directors and aquaculturists in Maine, and I think we were all unanimously agreed upon two points.

One is that universities to this point have not done a very good job in coordinating their efforts and establishing good research priorities; two, that they could do a very good service to the industry if the industry is brought into the process in terms of helping them to establish priorities and to perhaps help review proposals and communicating with the researchers to make sure that the results of the research are communicated directly to the industry and not buried in the scientific literature.

And so everyone I have talked to is unanimously agreed that we should support Subtitle L. We are firmly behind it, but we must make the point that industry has to be involved right from the ground level to ensure that federal monies go in the right direction. Thank you, sir.

Mr **Akaka**. Thank you very much. Are there any further questions? Well, I thank all of you very much for your testimony. You have an idea of how I feel, and I hope we can bring something about on this. Thank you very much.

[The statements of Drs. Heath, Parker, Ching, Mayer, Byrne, and Sedgwick, and Messrs. Tarbox, Glenn, Mackey, and Foil follow:]

Testimony Before

THE AGRICULTURE, RURAL DEVELOPMENT AND RELATED AGENCIES SUBCOMMITTEE ON APPROPRIATIONS, APRIL 16, 1986

concerning

THE WESTERN REGIONAL AQUACULTURE CONSORTIUM UNDER THE FOOD SECURITY ACT OF 1985

Written Statement by

Dr. G. Ross Heath, Dean, College of Ocean and Fishery Sciences,
University of Washington, Seattle, Washington

Mr. Chairman and Members of the Subcommittee: I am pleased to have this opportunity to comment on the aquaculture and related provisions included in the Food Security Act of 1985. The Western Region of the United States has been involved with aquatic animal husbandry or aquaculture since the turn of the century. A wide range of aquatic organisms are grown commercially or are being considered for cultivation along the west coast. Trout, salmon, catfish, oysters, clams and mussels are presently cultured for the commercial market. Other species such as sturgeon, striped bass, talapia, crayfish, abalone and scallops are being evaluated critically as potential culture candidates. Even seaweed culture has received considerable attention recently. None of the these culture types are without problems resulting from inadequate understanding of their life histories, basic requirements for commercial culture, and production technology. Much still needs to be done to address these problems if we are to benefit from the growing trend within the United States and worldwide to develop aquatic products for the market.

Recognizing the need to solve the near and long-term problems facing aquaculture producers and to help aquaculture reach its enormous potential for growth in the United States, five universities have come together to form the Western Regional Aquaculture Consortium. The University of Alaska, Juneau; University of California, Davis; University of Idaho; Oregon State University; and the University of Washington in cooperation with Washington State University have linked together to form this Consortium and will involve other universities, colleges, private organizations, and state and federal agencies as cooperators and/or collaborators on critical research, development and demonstration programs addressing obstacles which might impede viable aquaculture development.

It is no secret that in recent years there have been shifts in the demand for various food products. Consumption of fish has increased markedly because of its low fat content, and because medical studies are showing very decided health benefits for those who eat fish products. In addition, the ability of aquaculture to deliver an attractive, fresh product anywhere in the country throughout the year has opened markets in many parts of the United States. With this in mind, Americans seem to be using more and more aquatic products in their diet, mainly due to greater awareness of health issues. Recent information shows that the consumption of fish and shellfish continues to climb and reached a record 13.6 lbs of edible meat per capita in 1984, an approximate 32% increase over consumption in 1960.

World aquaculture production has increased from 13.4 billion lbs (6.1 MMT) in 1975 to approximately 23 billion lbs (10.4 MMT) in 1983; a substantial jump in production. According to the Food and Agriculture Organization of the United Nations Report, this growth is expected to continue with 8% annual increases through the year 2000. In terms of meat production "on the farm," aquaculture presently ranks fourth in the world behind beef and veal, pork, and poultry, but ahead of lamb, mutton and goats combined. Aquaculture's share of total meat production has increased in recent years while the other meat groups, except poultry, have declined.

The world fish catch, which includes aquaculture products, has been stable over recent years at 143-167 billion lbs (65-76 MMT) annually. Not all of the fish catch is used for human food; some goes to byproducts for animal feed. More than 15 years ago, international management experts recognized that the total world fish catch would reach no more than about 220 billion lbs (100 MMT) for the year 1990-2000. It is very doubtful whether such a level can be reached unless the general populations begin to consume more of the non-traditional types of aquatic products. Nor can it be reached without help from aquaculture.

Another concern is that the U.S. wild fisheries picture is far from healthy. Foreign nations continue to receive huge amounts from our fishing grounds under complex agreements, especially during the past 10 years. This situation is likely to continue for a number of years and has implications for our trade in fisheries. Over the past decade, U.S. exports of fish and shellfish have remained relatively constant whereas imports have increased. In fact, fish imports cost an alarming total of 5.9 billion dollars in 1984, while exports totalled only about 1 billion dollars. The deficit continues to create a drag on the U.S. economy, a situation that will get worse if experts' predictions that the U.S. trade deficit for fish will reach more than 7 billion dollars in 1985 are correct. Based on recent figures supplied by the U.S. Department of Agriculture, aquaculture production in the United States has shown a sharp increase from 130 million lbs in 1975 to a projected figure of 500 million lbs in 1985. Also, in 1977, the National Academy of Sciences (NAS) projected that production of 500 million pounds by 1985 and 2 billion lbs by the year 2000. The NAS projection for 1985 was right on the money. We may not meet the NAS's projection of 2 billion lbs by the year 2000, but I would venture to guess that this figure can be reached by 2010 if there is an adequate research and education base in place.

The West Coast states are fully cognizant of the recent positive moves toward global, national and local coordination of aquaculture activities. We have vast areas suitable for culturing freshwater and saltwater species, and more and more people are requesting information on how to start an aquaculture enterprise. Recent aquaculture development in the United States has placed heavy demands on the research and extension community and on teaching programs which provide general and technical aquaculture information. This demand has increased dramatically in recent years. Frankly, we are moving too slowly to meet it and to develop the technology that is needed to assist this development.

Over that past 8 years, studies by various government agencies have outlined constraints to rational aquaculture development and have identified steps to be taken to overcome these constraints. Solutions have not been implemented, however, forthcoming because the National Aquaculture Act of 1980, has never been backed with appropriated funds. Thus, I feel it is significant that Congress recognized the opportunity to make crucial progress in aquaculture development when it included in Title XIV of the Agriculture and Food Act of 1980 and the Food Security Act of 1985, the authority to establish up to four research, development and demonstration centers in the United States, involving associations of colleges and universities, State Departments of Agriculture, federal facilities, and non-profit private research institutions. This section of Title XIV, commonly referred to as Subtitle L, provided the Department of Agriculture in concert with other public institutions with authority to carry out the provisions and recommendations of the National Aquaculture Development Plan.

We believe that the Congress correctly intended to develop this mechanism to take advantage of the best research and education skills and facilities in the country. We believe that through this legislation Congress wished to foster cooperation and collaboration among these institutions and organizations, and expects that, collectively, these institutions will target aquaculture development in an orchestrated manner.

Thus, it is with pleasure that I represent the universities who have come together to form the Western Regional Aquaculture Consortium. Our Consortium is dedicated to act as a vehicle for coordination and/or cooperation with private aquaculture industries and other major university, college, state, federal and private organizations having a vested interest in the development of aquaculture in the western region of the United States. We will work closely with other groups from the New England area, the Gulf Coast area, and Hawaii to address critical research, development and demonstration programs needed to overcome obstacles impeding the development of viable aquaculture in this country.

In summary, Mr. Chairman, all of us recognize that the consumption of fish and shellfish products by the people of United States is reaching new highs each year. The demand for aquatic products is leading to the import of more and more products from abroad with resultant negative impacts on the U.S. balance of trade, yet at a time when U.S. fish and shellfish farmers clamor for opportunities to compete. The United States business community, in response to the demand for high quality aquatic products, has continued to import species that can be raised domestically. Yet our support for efforts to raise aquatic products locally has been minimal, at best. We now face a situation where we have little or no new aquaculture technology on the shelf to apply. Fortunately, Congressional support through the U.S. Department of Agriculture to gives us an opportunity accelerate the development of aquaculture in this country.

Mr. Chairman, the Food Security Act of 1985 designates the U.S. Department of Agriculture as lead federal agency for aquaculture development. We urge the Subcommittee to encourage the development of a viable and aggressive aquatic industry in the U.S. by supporting the implementation of Subtitle L.

This concludes my remarks. My colleagues and I will be pleased to respond to any questions that you or the members of the Subcommittee might have.

FOOD SECURITY ACT OF 1985

STATEMENT OF HENRY S. PARKER, SOUTHEASTERN MASSACHUSETTS UNIVERSITY

ON BEHALF OF

THE AD HOC STEERING COMMITTEE FOR NEW ENGLAND AQUACULTURE

BEFORE

THE HOUSE SUBCOMMITTEE ON AGRICULTURE, RURAL DEVELOPMENT AND RELATED AGENCIES, COMMITTEE ON APPROPRIATIONS

(THE HON. JAMIE L. WHITTEN, CHAIRMAN)

Mr. Chairman and members of the subcommittee. Thank you very much for the opportunity to provide testimony on behalf of the aquaculture-related provisions of the Food Security Act of 1985. I am pleased to represent the aquaculture interests of seven different universities and research institutions in the New England states. Also with me today are Mr. Brian Tarbox, President of the Maine Aquaculture Association, who will provide written testimony on behalf of the private aquaculture industry in New England, and Mr. Gary Glenn of the Massachusetts Executive Office of Economic Affairs. Mr. Glenn is representing Dr. Jean Mayer, President of the New England Board of Higher Education and President of Tufts University. Dr. Mayer could not be with us today, but his supporting statement has been submitted for the record.

We are united in our strong support of the aquaculture provisions of the Food Security Act of 1985 and, in particular, subtitle L. Our New England institutions and industry representatives are convinced that aquaculture has enormous potential for growth in the U.S.; that we are at a critical juncture in the realization of this potential; that expanded research, development, educational, and demonstration projects are essential to this realization; and that our New England institutions are exceptionally well qualified to carry out such projects in cooperation with private industry and state agencies.

Why does aquaculture have such great potential for the United States? First, our harvests of natural stocks of fish and shellfish appear to have peaked. Many species are overexploited and others are being fished at maximum substainable yield. Second, the U.S. appetite for fish products is growing rapidly, in part because of growing awareness of the health benefits of eating fish. How is this growing demand being satisfied? Largely through imports. In 1984 we imported $6 billion worth of fisheries products while exporting only $1 billion. These imports contribute substantially to our balance of payments deficit. Nearly two-thirds of all the fish and shellfish Americans eat is harvested by other nations. Third, aquaculture production is increasing rapidly in other parts of the world with a total annual output of over 22 billion pounds and an annual growth rate of 8% per year. Significantly, farm production of other meat staples, including beef, pork, and lamb is declining. There have been some notable aquaculture successes in other countries in recent years. For example, in the last 10 years, Norway's cultivation of Atlantic salmon has grown from an essentially non-existent industry to a $100 million a year business. Norway is actively seeking to expand its cultivation into other countries. Already much of their farmed salmon is exported to the U.S. Even in the United States, which has traditionally lagged behind other countries in aquaculture development, the industry is growing rapidly. Production has tripled within the last decade to nearly 500 million pounds per year. The combined income of U.S. producers exceeded $500 million dollars in 1984. Aquaculture may be one of the few truly profitable and expanding areas of American agriculture today.

Interest and involvement in aquaculture is strong in New England. We have a number of committed growers - there are 82 separate shellfish aquaculture grants and five private fish hatcheries in Massachusetts alone. We have identified nearly 100 different private corporations involved in New England aquaculture. Industry representatives in Maine, Massachusetts, and Rhode Island have organized state aquaculture associations. The region has considerable expertise in aquaculture research and education - at least 18 academic and research institutions have aquaculture programs. New England boasts one of the highest concentrations of institutions engaged in marine research of any region in the world. The governments of the New England coastal states are increasingly committed to aquaculture and some 30 different government agencies provide research and educational support for fish and shellfish farming.

Sadly, despite strong interest, support, commitment, expertise, and scattered successes, aquaculture has yet to become a viable economic activity in New England. Why? Because, until now, there has been no coordinated federal support and national strategy for aquaculture research and development; no established mechanism or incentives to consolidate the outstanding academic expertise and bring those resources to bear on problems of the aquaculture industry; and no unified program of public education to inform the citizenry of the benefits and potential economic advantages of aquaculture. Passage of the proposed legislation would provide vital support and incentives for coordinated aquaculture research, development, and educational programs.

How would we in New England apply the provisions of this important proposed legislation? First, the seven institutions represented by our ad hoc committee, and other New England marine institutions, would work with industry to identify critical problems and to develop an interinstitutional program of targetted, focussed research to resolve those problems. By pooling resources and applying the particular expertise of each institution to the problem in question, duplication of effort will be avoided and efficiency would be maximized. Industry problems which beg targetted research abound in New England. For example, on Cape Cod a recent outbreak of the parasitic shellfish disease, MSX, has wiped out the oyster crop of one of the most successful oyster growers in the country. MSX is a widespread problem and a constant threat to the oyster industry throughout the Northeast, yet our knowledge of the life history and etiology of the disease organism is still woefully incomplete. Another example: A successful shellfish farmer on an unspoiled offshore island wishes to expand his production and needs to know if his private coastal pond can support expansion. A coordinated program of focussed research could provide the answers he seeks.

There are a number of other critical areas where targetted, inter-institutional and interdisciplinary aquaculture programs can accomplish what a single institution cannot. Hatchery production of juvenile organisms for growout in the natural environment is constrained by high larval feed costs, yet our knowledge of the nutritional requirements of most cultivated organisms is so inadequate that development of nutritionally appropriate, inexpensive alternate feeds is still in its infancy. There is great potential for improving growth rates and environmental tolerances of aquaculture crops through applications of genetics and biotechnology, yet aquaculturists are 30 years behind the agriculture industry in such research. The proposed legislation would provide critical support for such research. The aquaculture industry throughout New England is beset by regulatory and access problems which are in part attributable to public misconceptions about aquaculture. A coordinated, region-wide public education program, supported by resources provided in the proposed legislation, would help resolve these misconceptions and stimulate public support for aquaculture. The aquaculture industry is in vital need of pilot/demonstration projects which allow scaled-up testing of technological innovations developed in the laboratory. Passage of the proposed legislation would provide support for such projects.

Mr. Chairman, the Food Security Act of 1985 designates the U.S. Department of Agriculture as the lead federal agency for aquaculture development. We urge that the Subcommittee give encouragement to this important but nascent industry in the form of support to implement Subtitle L.

This concludes my remarks. I will be pleased to attempt to answer any questions you or the members might have.

Testimony for Regional Aquaculture Centers

Chauncey T.K. Ching

on behalf of the Ad Hoc Aquaculture Group (Hawaii)

To House Agriculture Appropriations Subcommittee

April 16, 1986

Mr. Chairman and Members of the Subcommittee, my name is Chauncey Ching. I am director of the Hawaii Institute of Tropical Agriculture and Human Resources at the University of Hawaii. Today I represent a group of colleagues in Hawaii who have interest and belief in the potential for aquaculture. Members of this group include leaders from the University of Hawaii's Institute of Marine Biology, the Sea Grant College Program, and the College of Tropical Agriculture and Human Resources; the Oceanic Institute; and, the state Aquaculture Development Program of the Hawaii Department of Land and Natural Resources.

I thank you for allowing me to comment on the merits of Subtitle L of Title XIV of the Agriculture and Food Act of 1980 and the Food Security Act of 1985. As you know, this section authorizes the establishment of up to four regional aquaculture research and development centers.

I think we would all agree that aquaculture is playing an increasingly important role in the national agricultural economy, as evidenced by the many federal and state agencies involved in aquacultural research and demonstration. Aquaculture is emerging as a vital national industry as well as a means to redress the fisheries trade deficit. Aquaculture has the potential to meet the American consumers' increased demand for aquatic products and the potential to contribute to the domestic economy and nutritional needs of lesser developed countries.

Today I focus on how we can best fulfill aquaculture's economic potential through implementation of Subtitle L. In particular, I address the national benefits that will result from establishing a regional center for tropical and subtropical aquaculture in the state of Hawaii.

While everyone holds affection for their home state, I note that Hawaii's location in the middle of the Pacific Ocean makes it geographically and climatically unique--and ideally suited for marine science and tropical aquaculture. For example, the climate associated with Hawaii's subtropical location can support a year-round growing season for commercially-valuable fish and shellfish. This offers significant advantages for commercialization of any given cultured species. Further, production not interrupted by cold winters is of incalculable benefit for education and training programs. Thus, programs providing hands-on experience can be offered on a year round basis.

A general advantage of regional centers is that they would be mechanisms for integrating the expertise and support of the myriad agencies, educational institutions, and private organizations dedicated to research, development, and training in aquaculture. Programs from each of these sectors may be of extremely high quality but must be coordinated before we can identify the strengths, weaknesses, and future directions of aquacultural technology. By establishing these centers, we can have the considerable scientific resources of the nation as a whole moving forward in a planned and coordinated manner.

The state of Hawaii has long recognized that aquaculture is an environmentally sound complement to diversified agriculture and has given it a high priority in state development plans. In fact, Hawaii was the first state to prepare a comprehensive aquaculture development plan. We in Hawaii firmly believe aquaculture will be a substantial industry, and that the best means to develop it is by adopting a unified, multidisciplinary approach, with strong representation from the public and private sectors and the academic community. We do not want to re-invent the wheel nor use it to run over each other.

The importance of involving the private sector cannot be overstated. When my colleagues and I established the Ad Hoc aquaculture group, our first priority was coordinating activities in the public and private sectors. It is our belief that the development of the regional centers provided for by Subtitle I should reflect a similar mix of private and public expertise. Including public and private organizations in the centers ensures that the knowledge created through research is extended to practical applications.

The high level of interest in aquaculture in Hawaii is only exceeded by the level of expertise available. Over the past decade, a scientific and technological infrastructure has emerged from the significant progress made in culture technology and development. The research contributions of both public and private institutions in Hawaii have identified species appropriate for large-scale culture and the environmental parameters necessary for controlled maturation, reproduction, and larval rearing of fish and shellfish. Coordinating these research efforts under the aegis of a regional center for tropical aquaculture will concentrate all our expertise on eliminating the remaining economic and technological constraints to commercial production and on developing large-scale, profitable aquaculture.

Another outstanding benefit of the regional center concept is the ability to coordinate necessary training programs. There is at present no private or governmental organization in the United States equipped or designed to handle all facets of tropical aquacultural training. If aquaculture is to grow as a domestic industry, there must be an adequate supply of professionals and technicians able to devise and implement new technology. If aquaculture is to have a significant impact on the economy and nutritional status of lesser developed countries, there must be a means to transfer current technology.

Hawaii is commonly called "the crossroads of the Pacific" because of settlement by immigrants from Pacific and Asian nations. Strong economic and cultural ties remain. Many countries in the Pacific/Asian region have a long tradition of depending on aquaculture for sustenance and domestic industry. There is much we can learn from the aquacultural practices of these countries and Hawaii is an ideal place to focus such learning.

Quite naturally, Hawaii also has an affinity for island communities, such as Puerto Rico or the Virgin Islands, who are geographically and historically dependent on aquatic products. We see a tropical regional center as a means to transfer methods developed by coordinated research to trainees from the Pacific Basin, from Asia, and from island nations in general.

Mr. Chairman, I respectfully submit that we should not continue to rely on diminishing fisheries nor ignore increasing trade deficits for fish and shellfish. We should not continue to count on an aquacultural industry being built on scattered and uncoordinated research efforts. We should not continue to believe that economic benefit can accrue to a business without an adequate supply of trained personnel. We should not expect to be of service to lesser developed countries without establishing a solid base in our own country. Most of all, we should not continue to expect old methods will yield new results. If aquaculture is to continue its present growth, we must have a means of coordinating aquacultural know-how, both public and private. It is our belief that Subtitle I of Title XIV can be the means to accomplish this and I request your support.

Mr. Chairman, thank you for your time. I will be happy to answer any questions you or the members of your committee might have.

STATEMENT BY DR. JEAN MAYER

AGRICULTURE, RURAL DEVELOPMENT, AND RELATED AGENCIES SUBCOMMITTEE ON APPROPRIATIONS.

April 15, 1986

My name is Dr. Jean Mayer. I am President of Tufts University, and I currently serve as Chair of the New England Board of Higher Education, which represents the six New England states.

I am pleased to support the aquaculture provisions of the Food Security Act of 1985 and the strengthening of United States Department of Agriculture involvement with aquaculture. In New England, we are making strong efforts to develop cooperation among our six states in the area of aquaculture and marine science. Five of our states have marine coastlines, and the sixth has substantial fresh water resources.

Our region has traditionally been one of the major sources of fish production for the United States. Now, this industry is ready to evolve into a new technological era, one which emphasizes biotechnology and genetic engineering. As human comsumption of fish products increase, it is especially important that we develop the technology required to keep our industry competitive and strong.

Universities in the six New England states have been organized into a cooperative organization to design programs and research projects that will benefit the entire region. I am proud of the way universities, both public and private, have agreed to cooperate, share information, and help one another to solve common problems. In my own school, Tufts University, the Chair of the Department of Comparative Medicine in the School of Veterinary Medicine, Dr. Carol Reinisch, is conducting research on shellfish which, if successful, will have important benefits for aquaculture in all parts of New England and in other shellfishing areas. Additionally, researchers in 16 different colleges and universities in the New England region are working on problems related to aquaculture. It is virtually important that we support these efforts in every way possible. It is especially important that these efforts be orchestrated in such a way as to avoid duplication, and to maximize economic development.

To the extent that the Food Security Act of 1985 assists America to become competitive in aquaculture now and in the future, we will all benefit.

Thank you.

Statement of Dr. John V. Byrne, President
Oregon State University
Before the House Subcommittee on Agriculture, Rural Development and Related Agencies

Mr. Chairman and members of the Subcommittee, thank you for the opportunity to comment on the aquaculture provisions of the Food Security Act of 1985. I offer these comments on behalf of the Western Regional Aquaculture Consortium, composed of the University of Alaska, the University of California, Davis, the University of Idaho, Oregon State University and the University of Washington. Our Consortium represents the collective aquaculture research and development interests of the five states.

My specific message is to express the concern of our member institutions about the status of aquaculture development in our region and in the U.S., and to encourage your support for the implementation of Subtitle L of Title XIV of the Food Security Act of 1985.

We are especially concerned about the growing dependence on imported seafood products at the expense of domestic production. At a time when Americans are consuming greater and greater amounts of seafood each year, most of our domestic fisheries resources are either overexploited or already harvested at maximum sustainable yield. It is clear that we must find alternate sources of fisheries products. At the present time, we seem content to rely on imports to satisfy the increasing demand. Consequently, our trade deficit in fish and fisheries products hovers around the $6 billion per year level.

We are also disappointed by our inability to capitalize on the potential opportunities to create new employment through aquaculture in our region. Producers need assistance in the form of regional and national research and development programs if they are to reach their production potential.

The National Aquaculture Act of 1980 (P.L. 96-362) was enacted to stimulate aquaculture production in the United States. Unfortunately, the provisions of the Act, its 1984 extension, and subsequent reference thereto as part of the Food Security Act of 1985 have never been implemented with appropriated funds.

Aquaculture is an important, well established activity in the western United States. The major share of rainbow trout produced in the U.S. are produced in our region. Rainbow trout production is second only to catfish among farm raised fish in the U.S. Our commercial and recreational salmon fisheries are highly dependent upon aquaculture for their cotinued existence. For example, over 80 percent of the silver salmon landed in the Pacific northwest result from aquaculture in the form of public and private hatcheries. Virtually all the oysters and an increasing proportion of the clams produced on the west coast are cultured, and there is increasing production of other species, including catfish, sturgeon, and striped bass.

Although current levels of production are encouraging, production could be substantially increased if technological and institutional constraints limiting production efficiency and further expansion can be eliminated. Research in physical, biological, and social sciences is needed to relieve these constraints. Our Consortium was founded to bring together the research and development capabilities of the Land Grant and Sea Grant Colleges of our region to address these research needs. Our charter provides for including state and federal agencies and other academic institutions in these regional research and development activities. Unfortunately, mechanisms for funding these coordinated regional research and development activities do not exist at the present time.

Mr. Chairman, the provisions of Subtitle L of Title XIV of the Food Security Act of 1985 could be the catalyst that can enable U.S. aquaculture to realize its full potential. We strongly urge that your subcommittee recommends implementation of Subtitle L.

Statement of Charles Sedgwick, D.V.M.
Director, Tufts University Wildlife Clinic
Assistant Professor of Environmental Studies

before

The House Subcommittee on Agriculture,
Rural Development and Related Agencies

Mr. Chairman and Members of the Subcommittee, I am pleased to have this opportunity to comment on aquaculture in our country today.

We at Tufts are working to solve the near-and long-term problems facing aquaculture producers and to help aquaculture reach its enormous potential for growth in the United States.

The rate of growth in annual world landings began to shrink in the early 1970s as important fisheries reached maximum sustainable yields and others were overexploited. We need to reverse this trend.

Between 1950 and 1970, the annual increase in landings averaged 2.23 billion pounds. Since 1970, however, the landings have increased at an annual average of only 0.84 billion pounds. Frankly, unless we eat things we haven't before, we're just not going to see meaningful increases in ocean landings. In 1983, world commercial fisheries landings accounted for 87.8% of total world production of fish and shellfish; aquaculture accounted for 12.2%.

The U.S. fisheries picture shows little growth. Foreign fleets continue to take huge amounts from our fishing grounds under complex agreements, especially in the past ten years.

This relationship is likely to continue and is reflected in our trade in fisheries. Over the past decade, U.S. exports of fish and shellfish have remained relatively level while imports have increased. In fact, imports reached an alarming record of $5.9 billion in 1984 while exports totalled only about $1 billion. Many experts expect that the U.S. deficit will reach over $7 billion in 1985.

As the Members of the Subcommittee know, Americans seem to be using more and more aquatic products in their diets---possibly due to a greater awareness of health issues. Aquaculture can deliver high quality products year-round. Per capita consumption of fish and shellfish continues to climb, and reached a record 13.6 pounds of edible meat in 1984. On a live weight basis, this amounts to over 35 pounds per person.

In recent years, world aquaculture production has increased to over 22 billion pounds and is projected to grow by about

8% annually through the year 2000. In terms of "on the farm" meat production, aquaculture ranks fourth in the world, behind beef and veal, pork, and poultry, but ahead of lamb, mutton and goats combined. Aquaculture's share of total meat production has increased in recent years while the other meat groups, except poultry, have declined.

Between 1975 and 1984, U.S. Aquaculture production increased from 130 million pounds to about 470 million pounds. Most of this increase came in the last five years. As is the case for the rest of the world, production in the United States is expected to continue to increase---but probably at a rate faster than all other countries combined.

In 1977, the National Academy of Sciences projected that production would reach 500 million pounds by 1985 and 2 billion pounds by the year 2000. It appears that the NAS projection for 1985 was correct. We may not rise to the NAS projection of 2 billion pounds by the year 2000, but could very well by the year 2010 with an adequate research and education base in place.

Approximately one-half of U.S. aquaculture is catfish, but over 20 species of marine finfish and molluscs, fresh-and saltwater-crustaceans, freshwater finfish, anadromous species, ornamentals, non-food fish, reptiles and aquatic plants are grown. And the combined income of all producers continues to climb. It was over $500 million in 1984. This may represent one of the few truly profitable and expanding areas of American agriculture today.

But, like land-based animals, aquatic species require adequate diets, a healthy growing environment, health maintenance and disease control, and control of reproduction. Considering that each species' needs are different, aquaculture constraints and opportunities are complex.

Recent aquaculture development in the United States has placed strong demands on the research and extension community and on teaching programs and the public demand for general and technical aquaculture information has increased dramatically in recent years. Frankly, we have no new aquaculture technology on the shelf to apply.

Federal involvement in aquaculture is also complex with more than 14 agencies within USDA involved, and at least 13 Departments and Agencies outside USDA concerned with research and education and regulatory matters. Over the past 8 years, development plans have been published by various government agencies outlining constraints to rational aquaculture development and identifying steps to be taken to overcome those constraints.

Solutions to those problems have generally not been forthcoming because the National Aquaculture Act of 1980, extended in 1984, and subsequently amended and extended as part of the Food Security Act of 1985, has never been implemented with appropriated funds. In fact, no Federal Public Laws specifically targeting aquaculture activities have been funded, including the most important provision in the Food Security Act, Subtitle L, of Title XIV.

Because of complex legal, historical, and administrative restrictions and considerations, current aquaculture funding sources from Federal and State organizations cannot be targeted on major aquaculture problems in a fully coordinated manner.

However, a number of institutions in the United States have considerable expertise in the "aquaculture sciences" and depth in aquaculture research and development facilities, as well as strengths in extension education, technology transfer, and information dissemination.

These national resources are not now well utilized, nor are they interlocked prgramatically. In particular, the unique strengths of the private sector in aquaculture research and development have never been fully integrated into national aquaculture decision-making.

The Congress recognized this national expertize and the opportunity for making significant progress in aquaculture development when it included in Title XIV of the Agriculture and Food Act of 1980 and the Food Security Act of 1985, the authority to establish up to four research, development and demonstration centers in the United States, in association with colleges and universities, State Departments of Agriculture, Federal facilities, and non-profit private research institutions.

This Section, commonly referred to as "Subtitle L", was intended to be the authority for the Department of Agriculture to carry out the provisions and recommendations of the National Aquaculture Development Plan in concert with other Public institutions.

We believe that the Congress correctly intended to develop this mechanism to take advantage of the best research and education skills and facilities in the country. We believe that the Congress wished to foster cooperation and collaboration among these institutions and organizations, and expected that collectively, these institutions would target aquaculture development in an orchestrated manner.

Unfortunately, Mr. Chairman, at a time when the U.S. trade deficit in fish and fish products reaches new highs each year and Americans are consuming greater and greater amounts of aquatic food products...at a time when U.S. fish and shellfish farmers clamor for an opportunity to compete with imports, the United States is not adequately supporting its aquaculture programs.

Mr. Chairman, the Food Security Act of 1985 designates the U.S. Department of Agriculture as the lead Federal agency for aquaculture development. We urge that the Subcommittee give encouragement to this important but ancient industry in the form of support to implement of "Subtitle L".

This concludes my remarks. I will be pleased to attempt to answer any questions you or the Members might have.

Maine Aquaculture Association
P. O. Box 535
Damariscotta, Maine 04543

TESTIMONY OF THE MAINE AQUACULTURE ASSOCIATION BEFORE THE HOUSE APPROPRIATIONS SUBCOMMITTEE ON AGRICULTURE, RURAL DEVELOPMENT AND RELATED AGENCIES. April 16, 1986

Presented by: Brian Tarbox, President

TESTIMONY OF BRIAN TARBOX BEFORE HOUSE APPROPRIATIONS SUBCOMMITTEE ON AGRICULTURE, RURAL DEVELOPMENT AND RELATED AGENCIES. April 16, 1986

To the Honorable Jamie Whitten, Chairman, and members of the House Appropriations Subcommittee on Agriculture, Rural Development and Related Agencies. Thank you for this oppurtunity to provide testimony regarding the aquaculture industry in New England.

New England aquaculturists currently produce Blue Mussels, European and American oysters, quahogs, Atlantic salmon, Pacific salmon and rainbow trout. Table I summarizes some recent production figures for New England. These figures are conservative since many aquaculture landings are lumped in with the wild catch.

Potential for Expansion

Mussels and Atlantic salmon are two examples of the potential for expansion of aquaculture in New England.

In 1974, Maine harvested 308,000 pounds of blue mussels. None of this product was cultivated (Maine's Marine Fisheries 1947-1981). In 1985, Maine harvested 6,000,000 pounds of mussels and 20% of this or 1,200,000 pounds were cultivated (Maine Dept. of Marine Resources, Great Eastern Mussel Farms). In 1985 the cultivated harvest alone was 3.9 times the total harvest in 1974. Currently, the Netherlands is producing 100,000 tons of cultivated mussels annually while Maine is producing a combined wild and cultivated harvest of 3,000 tons. Clearly there is room for expansion in this industry.

In 1984 the United States imported more than 5,000 tons of European-farmed Atlantic salmon worth $44,000,000 (Sea Run, Inc.). Production of farmed salmon in Maine that year was less than one ton. In 1984 Scotland, with a coast about the same length as Maine's produced $35,000,000 worth of cultivated salmon. Given the strong market, the proximity to that market and the fact that other countries have had success in producing this fish, New England should be able to foster a robust salmon industry.

As aquaculture expands however, there will be numerous technical problems to be adderssed. Regional aquaculture centers working in close cooperation with the industry may be a good approach to solving these problems. The following text lists some problem areas that should be addressed:

Biological Problems

Biological problems include criteria for site selection, predator control, genetic improvement of stocks, environmental impact of harvesting gear, improved programs for pathological inspection and research on new species for cultivation.

Engineering Problems

There is a great need for the development of more efficient ways to harvest product and handle juvenile seed stock.

Marketing Problems

Aquaculturists need assistance in opening up new markets, developing and promoting high quality standards, ways to add value to the product through processing and improved packaging.

Pollution Control

In states such as Maine there may be adequate clean water for culture but continued coastal development may impact that quality in the future. In other states the expansion of aquaculture is limited by the availability of clean water.

Industry Perspective on the Development of National Aquaculture Centers

Aquaculture centers should be developed with an interdisciplinary approach. In order to address the above problems, the centers will require input from biologists, engineers, economists, food scientists and most importantly the industry itself.

Industry representatives should be involved in establishing research priorities, reviewing proposals and conducting field trials. Research results should be distributed directly to the industry via it's trade associations. By involving the industry in these processes we can insure that the work of the centers will directly benefit aquaculturists.

Table I

Landed Value of Shellfish Aquaculture Products from New England
(does not include salmon, trout)

Maine-1985	
Mussels	
Oysters	
Quahogs	$513,000
Massachusetts-1980	
Oysters	
Quahogs	$1,032,508
Rhode Island-1980	
Quahogs	$9,260
Connecticutt-1985	
Oysters	
Quahogs	$11,151,150

Data from Maine courtesy: Maine Dept. of Marine Resources, Great Eastern Mussel Farms

Data from Massachusetts, Rhode Island : "Survey of Maine Aquaculture", Coastal Resources, Inc., Wiscasset, Maine

Data from Connecticutt courtesy: John Volk, Div. Chief Connecticutt Dept. of Agriculture, Aquaculture Div.

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STATEMENT BY

GARY A. GLENN

Project Director, Marine Science
Massachusetts Centers of Excellence Corporation

Submitted To:
Agriculture, Rural Development, and Related
Agencies Subcommittee
Committee on Appropriations
United States House of Representatives

April 16, 1986

My name is Gary Glenn. I am the Project Director for Marine Science of the Massachusetts Centers of Excellence Corporation.

In Massachusetts we are proud of our economic success. Our unemployment rate is the lowest in the nation, and our rate of economic growth is among the highest. Marine industries have played a crucial role in this success. For the past three years a Massachusetts city - New Bedford - has been the nation's largest and most profitable fishing port.

A key element in the economic success of Massachusetts is the presence of today's most productive high tech industries. If we in state government are to be responsible guardians of the future, we must plan for tomorrow's technologies as well. For this reason we have created the Massachusetts Centers of Excellence Corporation, designed to identify and support those emerging technologies that will be the industry leaders of the 1990's and will provide the jobs our people will need in the 21st Century.

We have identified four technologies that appear to offer unusual promise for future development: biotechnology, polymer science, photovoltaics, and marine science. Within the category of marine science, aquaculture plays an important role.

The choice of aquaculture as a central component in the future economy of Massachusetts is a result of our strong belief that this industry will inevitably grow and prosper. We strive to make Massachusetts a leader in 21st Century aquaculture, as we are now a leader in fishing and other marine industries.

But neither Massachusetts nor any other state can fully succeed if the federal government is not supportive. The United States aquaculture industry needs the kind of orchestration that the federal government can uniquely provide. The aquaculture industry also needs focused research to solve specific problems that are impeding rapid commercialization.

Around the world, many countries are happily reaping the benefits of our past shortsightedness in the field of aquaculture. Only a few weeks ago we sponsored a major international conference on aquaculture, held at Southeastern Massachusetts University. The invited speakers included aquaculture experts from Norway, Israel, and Taiwan. All reported strong and expanding business in aquaculture. Just last week it was reported that aquaculture production in Sweden increased 21% last year. Country after country is reporting sizeable increases in the production and value of aquaculture products. And more and more American consumers are buying those products, to the detriment of the U.S. balance of trade.

There are two major problems with the United States position in world aquaculture. First, because we have not invested the necessary funds in our domestic industry, we are now losing $5 billion per year in negative balance of trade. Second, since technology is often a result of the actual experience of commercialization, the United States is falling farther and farther behind other countries in the use of modern biotechnology and other aquaculture techniques.

The answer to both problems is to use the proven capacity of the United States Department of Agriculture's extension and research network to solve key impediments to aquaculture commercialization, and then to substantially increase the level of business growth in the aquaculture industry. We in Massachusetts are willing to do our share. The Massachusetts Centers of Excellence Corporation just a few days ago announced a new program that will offer research grants to aquaculturalists and other marine scientists. Additionally we are pleased to be cooperating with our sister states in New England in the regional aquaculture network, We will do all we can to help our state, our region, and our country to become successful in aquaculture, and we hope the federal government will do the same. The time has come for America's world leadership of agriculture to be extended to aquaculture.

Thank you.

research community and industry with the final decision regarding relevance coming from industry representatives. Also, consideration of the quality of the science should have input from both segments with the major decision coming from the research institutions.

A third consideration is also important to industry. A vehicle for funding agricultural research currently exists through USDA and the Agricultural Experiment Station and is demonstrated by the phenomenal, historical success in agricultural research development and production. This includes the incorporation of the traditional "grass roots" participation by Cooperative Extension. The merit of the existing process is further evidenced by the recent success of the catfish industry in the South where the industry and universities cooperated to quickly identify and answer research- and production-related questions, allowing for rapid industry expansion. The success of U.S. agriculture must not be overlooked. I strongly recommend that this format be incorporated into a research thrust for aquaculture.

In conclusion, based on the industry's objectives, goals, and direction, I recommend that you appropriate funds contingent upon an adequate mechanism being incorporated that will provide formal industry involvement in the research projects based upon the criteria outlined above.

AQUACULTURE ON THE WEST COAST

Aquaculture in Alaska, California, Idaho, Oregon, and Washington is characterized by a wide diversity of climatic, physical, and infrastructural resources. Consequently, a diversity of species is cultured in these states. Commercial farmers in these western states raise many of the world's major aquaculture species including oysters, salmon, clams, mussels, abalone, trout, catfish, tilapia, striped bass, and sturgeon. These species are grown for food production and other purposes in fresh-, salt- and brackishwater; in cold and warm water; and in simple "backyard" systems, sophisticated "high tech" systems, and many intermediate forms. We farmers engage in some experimental or pilot operations; innovation is prevalent. The technologies some of us employ have resulted in significant improvements in aquatic food production methods. For example, geothermal resources have been tapped to raise warmwater species in cold climates. At Mt Lassen Trout Farm we have controlled photoperiod and water temperature along with improvement of genetic stocks to provide year-around production of high-quality trout eggs for use worldwide.

The western states have substantial human and technical resources for aquaculture. Both public and private research institutions have made significant scientific contributions to help further establish the industry. The aquaculture programs of several universities in the area have achieved excellent national and international reputations for research and training proficiency. However, only limited research

Statement of Phil Mackey
Mt Lassen Trout Farms, Inc., Red Bluff, California

before

The House Subcommittee on Agriculture,
Rural Development, and Related Agencies

Mr. Chairman and Members of the Subcommittee, I am pleased to have this opportunity to comment on the aquaculture and the related provisions included in the Food Security Act of 1985.

The industry view and recommendations expressed are my own but accurately reflect the overall philosophy of the industry. Most of my testimony concerning the industry status and needs is based on the report "AN ASSESSMENT TO THE PRODUCTION AND MARKETING OF AQUACULTURE PRODUCTS IN THE WESTERN REGION OF THE UNITED STATES," developed under a USDA grant by the West Coast Aquaculture Foundation, March 1984.

INDUSTRY VIEW

The 1985 Farm Bill authorizes the USDA to undertake an accelerated program on research development and demonstration projects in aquaculture. More specifically, in Subtitle L, Aquaculture Section 1474, the purpose and intent are clearly defined: "to promote research and Extension activities.... by encouraging landowners, individuals, and commercial institutions to develop aquaculture production and facilities and sound aquaculture practices that will, through research and technology transfer programs, provide for the increased production and marketing of aquacultural food products."

The industry wholeheartedly supports this concept, recognizing our developing needs and our involvement through the commitment of time and dollars from our industry. The aquaculture industry is evolving into an era of rapid technological advancement and increased production.

To date, the developments in western aquaculture production have come primarily from the industry itself; we have not developed as close a relationship with universities in our regions as we should, with some exceptions. Our industries have highly competent and technical people. We are organized well to recognize specific industry needs, both practical and applied.

We support the purpose of Subtitle L; my grave reservation, however, concerns the mechanism of implementation. Some key issues exist as we consider appropriation of funds for aquacultural research: (1) the relevance of research projects appropriate to industry's priorities and needs and (2) the soundness of the science of research projects involved. The relevance of research should have input from both the resources have been directed to problems related to commercial species or to the commercial industry. Federal and State Cooperative Extension efforts have been effective in transferring laboratory results to farm practice. A constraint to this transfer of technology is the limitation of Extension resources. Moreover, several of the western states are among the nation's leaders in introducing legislation and in planning and establishing programs to encourage the growth of the aquaculture industry.

An additional asset of considerable importance is the sizable market for seafood in the western region. In recent years, our vast population, including many of the Asian and Pacific ancestries, have provided us with a significant target market segment for seafood products--particularly for fresh products that are grown in close proximity to their market.

RESEARCH NEEDS

In order to consistently supply products year round, greater control over maturation and reproduction is necessary. This is especially true for farmers who now depend primarily on natural reproduction for stocking material. More research into extending spawning seasons and conditioning spawners to consistently produce viable offspring will show immediate results in production. In contrast, a method to reduce summer spawning activities of marine mollusks, particularly oyster, is necessary as meat quality is impaired during gonadal development.

Nutrition affects the health, vigor, growth, and reproduction of all cultured organisms. More definitive work on the nutritional requirements of fish and shellfish in production culture situations is needed for many species, particularly those with limited culture histories (e.g., mollusk larvae, striped bass, sturgeon). The special nutritional requirements of broodstock also warrant attention. Because feed costs may account for over one-third of the total production costs, rations that improve feeding efficiency and research into low-cost feed ingredients or supplements would benefit farmers.

A host of disease and parasitic organisms prove lethal to fish and shellfish. Sublethal effects are often reflected by poor growth or lowered production efficiency. Diagnostic clinics and professional disease expertise are essential to determine the cause, prevention and treatment of aquatic disease. Methods that allow mass vaccination or inoculation of stock are highly desirable. The development of effective, economical FDA-approved medications would greatly benefit the aquaculture industry. Research into animal metabolism and retention of medication is essential for the creation of logical and practical regulations controlling drug administration.

A basic knowledge of the effects of contaminants on all life stages and a greater understanding of how contaminants are accumulated, metabolized, and voided is needed. This information can be used to formulate new laws that protect the grower as well as the general public. Pollution within the culture system from waste metabolites from the cultured species, uneaten food, or high algal concentrations present serious problems; improved system designs are necessary.

Because federal and state regulations prohibit many predator and pest control methods, information regarding legal, cost-effective, reliable predator control methods or alternative culture techniques are necessary. Many farmers believe federal authorities should compensate growers for losses due to predation by protected species. Human poachers also exact a heavy toll in certain locations. Rigorous enforcement of stronger laws against aquatic theft has proven effective where applied.

Biotechnical constraints will not be alleviated through requests for research and innovation alone. Government agencies, research institutions and industry members must continue to work together to effect meaningful progress. Research using both public and private facilities and application of modern engineering concepts will enhance production. Because poor management practices contribute to the impact of the constraints discussed above, continued interaction of farmers with Extension and other university personnel regarding research findings, technical support, and diagnostic services is necessary to optimize production.

SUMMARY

Thank you for the opportunity to provide testimony on this important legislation. Industry strongly recommends that the concerns which I have raised be addressed and the appropriation be forthcoming.

April 16, 1986

STATEMENT OF RODNEY FOIL[1]
CONCERNING THE NEED FOR AQUACULTURE RESEARCH SUBMITTED TO THE HOUSE SUBCOMMITTEE ON AGRICULTURE, RURAL DEVELOPMENT AND RELATED AGENCIES

I am pleased to file this statement in support of the need for additional aquaculture research, to accompany testimony of a panel of interested citizens and scientists supporting the funding of regional aquaculture centers for the United States.

This subcommittee, and particularly the chairman, is well aware of the importance of aquaculture as a growing contributor to the United States agricultural economy and to the well-being of American consumers. In Mississippi, the pond-raised catfish industry has become a leader in economic development, and in the application of modern technology in the production of nutritious and economical food. Much of this progress has been due to investments in research and extension sponsored by this committee and the states of the Southern Region.

The directors of Experiment Stations and Extension Services in the South have long supported aquaculture. They authorized and funded a Regional Research Project on Warmwater Aquaculture some fifteen years ago, and this effort has grown to a cooperative venture involving thirteen southern agricultural experiment stations, six state university research programs, the Tennessee Valley Authority, and two units of the U. S. Department of Interior. Through this regional mechanism, the South has accomplished pioneering research while ensuring cooperation and coordination. Recently, the directors of Extension in the thirteen southern states joined with the Southern Experiment Station Directors in the creation of a joint committee to establish additional procedures for cooperation and coordination of functions. Research and Extension directors in Mississippi, Louisiana, Arkansas, and Alabama have been charged in the development of a position paper identifying issues and activities to be taken to strengthen research and extension efforts in aquaculture.

The Southern Region is truly committed to working together to expand aquaculture research and extension. Should funding become available to support regional centers, the mechanism is in place in the South to utilize such funding efficiently and effectively.

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[1] Director, Mississippi Agricultural and Forestry Experiment Station, Mississippi State University, Mississippi State, MS 39762

WEDNESDAY, APRIL 16, 1986.

CONSERVATION AND EXTENSION

WITNESS

RICHARD C. ELDEN, STATE ASSOCIATE, INTERNATIONAL ASSOCIATION OF FISH AND WILDLIFE AGENCIES

Mr. **AKAKA**. Richard Elden, International Association of Fish and Wildlife Agencies. Mr. Elden, we welcome you today. We will include your full text in the record and you may continue any way you want to.

Mr. **ELDEN**. Thank you very much. I will be as brief as possible.

Mr. **AKAKA**. Thank you very much.

Mr. **ELDEN**. Mr. Chairman, I am Richard Elden of the International Association of Fish and Wildlife Agencies, and I wish to comment on the Soil Conservation Service, Extension Service, and the Agricultural Stabilization Service budgets for this year.

The International Association of Fish and Wildlife Agencies is a quasi-governmental organization of public agencies which possess legal authority for protection and management of North America's fish and wildlife and their habitats. Founded in 1902, the association's governmental members include the fish and wildlife agencies of all 50 states, most Canadian provinces, as well as the federal fish and wildlife agencies of the United States, Canada, and Mexico

The association has been a key organization in promoting principles of sound resource management and in strengthening federal and private cooperation in protecting and managing fish and wildlife in the public interest.

State agency members of this association strongly support the high priority given to implementing the conservation features of the Food Security Act of 1985 in both the ASCS budget and the SCS budget. Further integration of conservation in the agricultural commodity program signals a positive response to the needed changes to prevent and control soil erosion potentially on more than a third of the nation's cropland while simultaneously improving the water quality habitat for a variety of living resources and providing for a sustainable agricultural base.

The state members support continuation of funding of the agricultural conservation program, the forest incentive program, and the water bank program of the Agricultural Stabilization and Conservation Service at the 1986 funding level. Reorientation of the agricultural conservation program within the past decade from strictly commodity reduction to combined conservation and commodity practices deserves continuing support.

The forestry incentive program is designed to assist small private landowners improve forest management. This program is the only incentive small landowners have to properly develop and manage rather than mine this nation's valuable forest resource on over 278 million acres, which is 57 percent of the total forest land in the United States.

The state fish and wildlife members of the association support continuation of the four conservations programs in the Soil Conservation Service's proposed 1987 budget: the conservation technical assistance, the soil surveys, the snow survey and water forecasting, and the operations of the plant materials center.

These programs are basic to provide farm/ranch planning and for placing agricultural land use on a more sustainable basis. Conservation technical assistance and soil surveys especially are vital to implementation of the 1985 Farm Act.

The state agency members of this association recommend a funding level at the '86 level for the extension service that will make it possible for that agency to sustain a renewable resource education program and assume a leadership role in the implementation of the Food Security Act.

We also support restoration of funds for the Renewable Resources Extension Act to at least the 1986 level. The administration proposal to reduce the extension service budget by 60 percent will greatly reduce the agency's ability to carry out its fundamental extension mission. With that reduction the funds for the Renewable Resources Extension Act are zeroed out.

These funds that were added by the Congress to support the Renewable Resources Extension Act go directly to the states, either to expand existing fish and wildlife extension programs or to initiate new ones.

These funds have had a leveraging effect, stimulating contributions by the state, federal fish and wildlife agencies and the land-grant universities for fish and wildlife extension education. Elimination of these funds will dismantle the natural resources unit, thereby destroying the cooperative effort between the federal and state and county to the extent that the fish and wildlife resource portion will be eliminated.

Additionally, it will weaken the role of the extension education and implementation in the Food Security Act, specifically those provisions relating to conservation reserve, swampbuster, sodbuster, and other important provisions in that act.

The member agencies of this association are prepared to assist USDA agencies, particularly the ASCS, SCS, Extension Service, and Forest Service in developing plans and implementing programs called for in the Food Security Act of 1985.

The considerable expertise in the state fish and wildlife agencies can be instrumental in providing multiple benefits in the best public interest. We request that the Congress ensure that these cooperative efforts can take place. We also would like to extend our expertise available to the committee in any way that we possibly could.

Mr. **Akaka**. Thank you very much, Mr. Elden, for your testimony. I want you to know that many of the statements here are close to our hearts and we hope we can assist your efforts.

Are there any further questions?

If not, thank you very much.

Mr. **Elden**. Thank you.

Mr. **Akaka**. There being no further witnesses, the hearing is adjourned.

[The statement of Richard C. Elden follows:]

COMMENTS OF THE INTERNATIONAL ASSOCIATION OF FISH AND WILDLIFE AGENCIES ON THE PROPOSED FY 1987 BUDGET OF THE SOIL CONSERVATION SERVICE, THE EXTENSION SERVICE AND AGRICULTURAL STABILIZATION AND CONSERVATION SERVICE

by

Richard C. Elden, State Associate

The International Association of Fish and Wildlife Agencies (IAFWA) is a quasi-governmental organization of public agencies which possess legal authority for protection and management of North America's fish and wildlife and their habitats. Founded in 1902, the Association's government members include the fish and wildlife agencies of all 50 states and most Canadian provinces, as well as the federal fish and wildlife agencies of the United States, Canada and Mexico. The Association has been a key organization in promoting principles of sound resource management and in strengthening federal, state and private cooperation in protecting and managing fish and wildlife in the public interest.

The state agency members of this Association strongly support the high priority given to implementing the conservation features of the Food Security Act of 1985 in both the ASCS and the SCS 1987 budgets. The integration of conservation in the agricultural commodity program signals a positive response to needed changes to prevent and control soil erosion, potentially on more than a third of the nation's cropland, while simultaneously improving water quality, habitat for a variety of living resources, and providing for a sustainable agricultural base.

Careful consideration should be given to using Commodity Credit Corporation funds for the conservation reserve in years beyond the 1987 crop year.

The state members support continuation of funding of the Agriculture Conservation Program, Forestry Incentive Program and the Water Bank Program of the Agricultural Stabilization and Conservation Service at the 1986 funding level. Reorientation of the Agriculture Conservation Program within the past decade from strictly commodity production to combined conservation and commodity practices deserves continuing support. The Forestry Incentive Program is designed to assist small private landowners improve forest management. This program is the only incentive small land owners have to properly develop and manage rather than mine this nation's valuable forest resource on over 278 million acres—which is 57% of the total forest land in the United States. The Water Bank Program should be continued until the swampbuster provision in the Food Security Act of 1986 is fully implemented.

The state fish and wildlife agency members of the Association support continuation of the four conservation programs in the Soil Conservation Service proposed FY 1987 budget: Conservation Technical Assistance at $286 million or more; Soil Surveys at $55 million or more; Snow Survey and water forecasting at $4 million or more; and Operation of Plant Materials Center at $4 million. These programs are basic to provide farm/ranch planning and for placing agricultural land use on a more sustainable basis. Conservation Technical Assistance and Soil Surveys are vital to implementing the 1985 Farm Act. We question the elimination of the rural abandoned mine restoration program. Funds for this important program are transferred to the Soil Conservation Service from the Department of Interior. Such funding should continue, if possible, to alleviate the landscape and water quality degrading situation associated with mined lands.

The state agency members of this Association recommend a funding level of $283.7 million for the Extension Service that will make it possible for that agency to sustain a renewable resource education program and assume a leadership role in implementation of the Food Security Act or Farm Act; and restoration of funds for the Renewable Resources Extension Act to at least the 1986 level of $2,485,000.

The Administration proposal to reduce the Extension Service budget by 60% will greatly reduce the agency's ability to carry out its fundamental extension mission. Within that reduction, the funds for the Renewable Resources Extension Act are zeroed out. These funds, added by the Congress to support the Renewable Resources Extension Act, go directly to the states, either to expand an existing fish and wildlife extension program or to initiate new programs. The funds have had a leveraging effect, stimulating contributions by the state and federal fish and wildlife agencies, and the land grant universities for fish and wildlife extension education. Forty-seven of the states have Memoranda of Understanding with the land grant universities and the Fish and Wildlife Service to carry out fish and wildlife extension work. Most are involved in developing annual plans of work for extension education. Elimination of the funds will dismantle the natural resources unit within the Federal Extension Service which was established following enactment of the Renewable Resources Education Act and will destroy the cooperative federal, state, county educational program for fish and wildlife resources. Additionally, it will weaken the role of extension education in implementing the Food Security Act, specifically those provisions relating to the conservation reserve, swampbuster, sodbuster, and other important provisions.

In the view of this Association, the stewardship and management of our resource base is essential to the Nation's defense. Natural resource management expenditures are investments for maintaining and perpetuating the economic well being and welfare of the Nation's citizens.

The member agencies of the Association are prepared to assist USDA agencies, particularly ASCS, SCS, Extension Service and the U.S. Forest Service, in developing plans and implementing programs called for in the Food Security Act of 1985. The considerable expertise available in the state fish and wildlife agencies can be instrumental in providing multiple benefits in the best public interest. We request that the Congress insure that cooperative efforts can take place.

Mr. **Akaka**. I would like to take a brief moment of the Committee's time to submit a statement on tri-fly research by Dr. Chauncey Ching of the Hawaii Institute of Tropical Agriculture.

The Committee began a valuable and promising program in fiscal year 1986 to develop new approaches for eradicating Hawaii's tri-fly problem. Dr. Ching has prepared a short statement on the current status of the project which I would like to share with my colleagues.

University of Hawaii at Manoa

College of Tropical Agriculture and Human Resources
Hawaii Institute of Tropical Agriculture and Human Resources
Gilmore Hall 202 • 3050 Maile Way
Honolulu, Hawaii 96822

Office of the Director

March 10, 1986

The Honorable Daniel K. Akaka
The United States House of Representatives
2301 Rayburn House Office Bldg.
Washington, D.C. 20515

Dear Mr. Akaka:

Enclosed is a status report on the project entitled "Nontoxicant Control of the Tri-Fly Complex." While we have not yet received monies to devote to this project, we have anticipated Federal support and have been able to initiate key aspects of the program.

We hope this information is useful to you in justifying the use of very scarce Federal dollars. We are cognizant of the responsibilities that we have in administering these funds. We take this responsibility seriously.

Thank you for your help in this important project.

Sincerely,

Chauncey T.K. Ching
Director

dcs

Enclosure

cc: Dr. N. P. Kefford
Dr. F. Greenwood
Dr. S. Patil

March 10, 1986

PROGRESS REPORT: NONTOXICANT CONTROL OF THE TRI-FLY COMPLEX

This is the first year of a five-year project dealing with nontoxicant control of fruit flies. This particular project has importance beyond Hawaii because the potential for fruit fly damage to agricultural crops in states such as California and Florida clearly impacts the national agricultural economy and well-being. Hawaii is in a unique position to investigate control methods on these pests since it is the only place in the world having the Mediterranean, melon, and oriental fruit flies.

The University of Hawaii, specifically through the Hawaii Institute of Tropical Agriculture and the Pacific Biomedical Research Center, has been working closely with the U. S. Department of Agriculture, Agricultural Research Service, in broad program planning of fruit fly control and eventual eradication. The emphasis has been on minimizing duplication of program efforts by USDA and the University of Hawaii.

At the present time, the specifics of the project are being submitted to the U. S. Department of Agriculture, Agricultural Research Service. There are four components to the project including genetic sexing, meiotic drive, behavioral aspects of sterile released flies, and the use of nontoxicant attractants and lures.

In anticipation of Federal support, the State of Hawaii General Funds have been used to initiate work on three of these four areas. Specifically in the area of genetic sexing, sophisticated equipment for fruit fly egg injection has been acquired and preliminary work on developing the conditions and procedures for injecting fruit fly eggs have been started. Further, the specific vectors to inject into the fruit fly eggs have also been secured from research laboratories on the U. S. mainland.

Work has also been initiated in observing the behavior of fruit flies. The contention here is that for maximum efficiency it is critical that the strain of fruit fly released under sterile release programs be competitive with wild populations.

Finally, research has commenced on a slightly longer range objective of ultimately being able to manipulate fruit flies so that there is a heritable tendency for flies to produce only male offsprings (a meiotic drive system called Segregation Distorter). While this particular approach is high risk, potential benefits merit devoting a portion of the project funds to this particular activity.

Mr. Akaka. We would like to insert at this point in the record a statement of our distinguished colleague on the Appropriations Committee, the Honorable Les AuCoin of Oregon.

TESTIMONY OF CONGRESSMAN LES AUCOIN
AGRICULTURE APPROPRIATIONS SUBCOMMITTEE

Mr. Chairman, members of the committee:

I'd like to thank you for giving me a chance to appear before you today.

I represent the First Congressional District of Oregon -- a diverse area stretching from the high technology corridors of Portland to the high production farms of the Willamette Valley and Oregon Coast.

It's a region of economic contrast -- a region with pockets of affluence surrounded by real adversity. It's a region struggling to overcome a prolonged recession in timber, fishing and other traditional industries -- including agriculture.

Oregonians know that sustained economic recovery depends on economic diversification. And something more. Long-term recovery means that while we work to promote new industry, we've also got to work to protect our rich natural resource base.

That's long been an Oregon tradition. In fact, Oregon was one of the first states to institute a system of comprehensive land use planning to balance conservation and development.

The measure of our success is the measure of our abundance. Oregon farmers produce over 100 different products, dozens in my district alone.

Responsible state stewardship helped make the most of Oregon's good climate, rich soil and hardworking population. State efforts, in turn, have been helped by a federal commitment to develop United States agriculture. A commitment that dates to the Morrill Land Grant College Act of 1862, the Hatch Act of 1887 and the Smith-Lever Act of 1914.

But while the White House has suggested some important increases in agriculture programs for Fiscal Year 1987, many of its recommendations would weaken the federal role in agriculture -- hurting production at home and our ability to sell United States farm products overseas.

At a time of tremendous stress in United States agriculture, the White House wants to back away from agriculture.

Away from over 50 years of support for the Soil Conservation Service. From Extension programs for research and education.

Away from export promotion that will decrease dependence on federal price supports -- which no one wants.

Mr. Chairman, we all know that Gramm-Rudman is going to force restructuring of some federal programs this year. There's no question that your task is complicated by the fact that spending on commodity programs constitutes such a large part of the agriculture budget.

But even with those constraints, there's no reason for the deep cuts the Adminstration has requested. I'd like to share with you my funding priorities for agriculture, priorities that will help stabilize conditions at home and expand markets overseas.

Agricultural Research

Only 15% of all agricultural products produced in Oregon stay in-state. Sixty percent are shipped to markets in other parts of the country. In Washington County, for example, farmers are using new technologies to process vegetables, keeping them field-fresh until they're sold at markets hundreds of miles away. These farmers know that technological advances can help them compensate for transportation and storage costs.

These farmers support the $15 million increase the Administration has requested for the Agriculture Research Service, and want the strongest possible program you can fund this year.

Soil Conservation

Tillamook County, Oregon is one of the most productive dairy regions in the Northwest. It's a coastal county, with some unique problems regarding disposal of animal waste and water quality in Tillamook Bay. Tillamook farmers have worked with the Soil Conservation Service to institute a comprehensive waste disposal plan. They can't afford the Administration's proposed SCS personnel cut, which would result in the loss of 24 employees in Oregon alone. .

Farmers, private industry and families in Washington and Columbia counties have been trying -- with my support -- to enter the Oregon SCS Research, Conservation and Development program. People like Marvin and Nancy Gullings, Jerry and Sandra Watson and 49 other homeowners in Aloha, Oregon who want RC&D aid to correct a flood hazard area -- and protect the health and safety of their children threatened by an open channel, increased rodents and other pests. We cannot let these families become victims of the White House efforts to slash the RC&D program by 50%.

The STEEP erosion program has been especially successful for meeting the unique needs of nursery, berry and nut growers in Oregon. Yet the White House is recommending a deep cut in this program. I ask your subcommittee to reject these proposals.

Finally, the Soil Conservation Service has recommended, as a "cost saving" measure, closing the SCS Technical Office in Portland. The Portland office functions, with some exceptions, would be transferred to Texas. I oppose this idea in the strongest possible terms.

I've written to SCS Administrator Wilson Scaling stating my opposition because the move will not save money up front -- but will result in a degradation of service quality to growers in the Pacific Northwest.

I would ask the Committee will take a careful look at the SCS budget to determine whether money that should be going to regular conservation activities is being used to carry out this planned consolidation.

Agricultural Stablization and Conservation Service

Wheat growers in Yamhill County, Oregon have had to contend with a multitude of changing regulations and guidelines in the federal wheat program this year. If it wasn't for the hard work and long hours put in my employees of the Agricultural Stablization and Conservation Service, these growers simply wouldn't have been able to get their contracts in order.

While the Department of Agriculture has provided for a temporary staffing increase in the ASCS this year, the Administration recommends nearly a 70% cut in ASCS programs in Fiscal Year 1987 -- and a reduction in staff. This is incomprehensible to me, and to anyone who is looking into our farm problems. With the possibility of more changes to the 1985 Farm Bill down the road, and continued work to be done on existing farm programs, wheat growers can't afford the proposed ASCS cuts.

Extension Service

During my time in Congress, I can't recall an issue that's so united the agricultural community in Oregon as the proposal to cut Extension programs by 60% and change the groundrules of the program.

John Rossner, President of the Yamhill County Farm Bureau wrote the following to me in a recent letter, "It is Extension programs that channel youthful energy into productive activities instead of trouble with the law. It is Extension that helps to develop new crops, new methods of insect, disease and weed control, better livestock husbandry practices, and a whole host of other improvements that help not only the farmer, but all citizens of this country."

Mr. Chairman, I stand squarely with Mr. Rossner and agree with his statement. Every $1.00 invested in Extension yields over $2.00 in volunteer efforts. It is outrageous and reckless to cut this program.

Overseas Marketing

Just as Oregon farmers depend on markets across the United States, they depend on markets across the sea. Oregon's geographic position and deep water ports make the state uniquely suited to take advantage of growing markets on the Pacific Rim.

Eighty-five percent of white wheat produced in the Pacific Northwest is shipped overseas. But for a number of reasons, our markets are slipping away. Last year wheat exports out of the Port of Portland declined by 50%.

The Oregon Wheat Commission and private groups are working hard to reverse these numbers. It's going to take an increased federal commitment to turn their efforts into a success story. Not only does the federal government have to work to make United States commodities more attractive, we've got to be more aggressive about fighting unfair foreign subsidies.

In view of these facts, it amazes me that the Administration's Fiscal Year 1987 Budget recommends cuts in export programs, including a nearly 11% cut in the Foreign Agricultural Service.

One of the programs within the FAS slated for deep cuts is the EIP/Cooperator program, a private/public partnership that receives relatively little government funding. Working through the Cooperator, farm organizations have funded innovative programs overseas to set the stage for long term export enhancement.

Oregon wheat growers worked through the Cooperator to build an advanced flour mill in China, and provide the necessary training and maintenance. The initial mill has spawned plans for more, with the potential for further projects down the road. While China doesn't import wheat now, with more projects like this spurring the demand for wheat, they just might. Mr. Chairman, I urge you not to cut this innovative program that holds so muhc promise for increasing future earnings in the agricultural sector.

The Administration is also proposing further cuts in PL 480 and Export Enhancement. It's no secret that the powers that be within the Agriculture Department strongly oppose expanding agriculture export programs. I find it incredible that, instead of using the authority in the Farm Bill to expand U.S. markets, the Department chooses instead to sit on record stockpiles of wheat.

Mr. Chairman, we have a long road ahead to improve the competitive position of American agriculture. Aside from funding for existing programs under the jurisdiction of this Subcommittee, Congress may also have to take another look at the issue of farm credit.

But even in the era of Gramm Rudman, by setting careful budget priorities, Congress can continue its support for agriculture -- support that has made American farmers some of the most productive in the world. I am convinced that the recommendations I am offering today, Mr. Chairman, are exactly the kind of priorities we need.

Mr. Akaka. We would like to insert at this point in the record a statement of our distinguished colleague, the Honorable Rick Boucher of Virginia.

FREDERICK C. BOUCHER
9TH DISTRICT, VIRGINIA

COMMITTEES

JUDICIARY

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EDUCATION AND LABOR

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MAJORITY WHIP AT LARGE

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Statement of Congressman
Rick Boucher
Before
the Subcommittee on Agriculture, Rural Development
and Related Agencies
April 14, 1986

I appreciate the opportunity to present testimony today in support of the request made by the Virginia-Maryland Regional College of Veterinary Medicine for an appropriation of $300,000 for the construction of additional classroom space at the College.

The Agriculture, Rural Development and Related Agencies Appropriations Act of 1984 contained $4.5 million for Phase III of the school's construction. The 1984 appropriation has facilitated rapid growth at the college; two classes have now graduated, and the Virginia-Maryland Regional College of Veterinary Medicine is a recognized leader in its field.

Although much has been accomplished in the five-year history of the school, there remains a pressing need for additional facilities at the School. The completion later this spring of Phase III construction will bring total space to 158,000 gross square feet (gsf), 67,000 gsf short of the College's original master plan.

Mr. Chairman, this deficiency in buildings and facilities at the College is being felt most acutely in the teaching program, where a severe shortage of classroom space has placed a serious hardship on both students and faculty.

Currently, the Virginia-Maryland College of Veterinary Medicine conducts several classes in rooms which were originally designed for the storage of equipment. The problems with such classrooms are obvious. Acoustics, visability and ventilation are poor and force students to contend with more than the already rigorous academic demands at the College.

Additionally, the College has no facilities for gathering the total 320-member student body together in one place for special lectures and student programs.

The modest construction plans embodied in this proposal will address these problems. The College intends to construct a three-classroom complex attached to the building completed during Phase II construction. These classrooms would be separated by moveable partitions so that the size of the lecutre areas could be adjusted for the size of the group. This feature would make the area available for meetings of the entire student body as well as smaller daily classes. Plans call for the new classrooms to be fully equipped with audio-visual equipment and to be readily accessible to outside animal holding facilities.

Under this proposal, 5,455 gsf would be added to the College's instructional facilities at a cost of $600,000. I would emphasize that the College is fully prepared to assume one-half of this cost in accordance with Title XIV of the 1985 Farm Bill.

Mr. Chairman, through the past support of this subcommittee, you and your colleagues have demonstrated an understanding of and commitment to the traditional mission of our nation's land-grant universities. The Virginia-Maryland Regional College of Veterinary Medicine has, during its brief existence, made great strides toward the fulfillment of that mission: it has improved animal health and welfare by increasing the quality of veterinary care; it has provided new educational opportunities for Virginia and Maryland students seeking careers in veterinary medicine; and it has developed basic biomedical and applied clinical programs to serve the region and nation.

The College will not, however, meet its full potential until the pressing need for additional classroom space is met. With the subcommittee's approval of this request, you can help to ensure that the College's progress continues.

Once again, I appreciate the opportunity to present testimony in support of this project, and, upon the Subcommittee's request, I would be pleased to supplement my testimony with any information you deem necessary.

Mr. **Akaka**. We would like to insert at this point in the record a statement of our distinguished colleague, the Honorable Glenn English of Oklahoma.

TESTIMONY OF CONGRESSMAN GLENN ENGLISH SUBMITTED TO THE HOUSE SUBCOMMITTEE ON AGRICULTURE, RURAL DEVELOPMENT AND RELATED AGENCIES

APRIL 23, 1986

MR. CHAIRMAN, I AM HAPPY TO HAVE THIS OPPORTUNITY TO SUBMIT TESTIMONY TO THE HOUSE SUBCOMMITTEE ON AGRICULTURE, RURAL DEVELOPMENT AND RELATED AGENCIES CONCERNING PROPOSED PLANS TO ELIMINATE FEDERAL FUNDING FOR THE HONEY BEE RESEARCH LABORATORY IN MADISON, WISCONSIN.

THE HONEY PRODUCTION INDUSTRY PRESENTLY INCLUDES OVER 210,000 BEEKEEPERS LOCATED THROUGHOUT THE NATION AND APPROXIMATELY 4.2 MILLION BEE COLONIES. IN 1981 THE VALUE OF THE NATION'S HONEY CROP TOTALED $117.5 MILLION. PRESENTLY, THE AGRICULTURAL RESEARCH SERVICE FUNDS BEE RESEARCH IN SIX FIELD LABORATORIES WHICH INCLUDE FACILITIES IN ARIZONA, LOUISIANA, MARYLAND, OKLAHOMA, TEXAS, AND WISCONSIN.

AS YOU ARE AWARE, THE U.S. DEPARTMENT OF AGRICULTURE HAS ANNOUNCED ITS INTENSION TO CLOSE TWO OF THESE FIELD LABORATORIES, THE FIRST OF WHICH IS LOCATED IN STILLWATER, OKLAHOMA, AND SECOND OF WHICH IS LOCATED IN MADISON, WISCONSIN. IT IS APPARENT THAT THE DEPARTMENT'S DECISION TO CLOSE THE WISCONSIN FIELD LAB WOULD ELIMINATE ARS'S ABILITY TO CONDUCT BEE RESEARCH IN NORTHERN LATITUDES AND COULD CERTAINLY DIMINISH OUR CAPABILITIES TO CONTROL MITES IN COLDER CLIMATES. IT IS MY UNDERSTANDING THAT THE AMERICAN HONEY PRODUCERS ASSOCIATION HAS ALSO EXPRESSED ITS CONCERNS OVER AND OBJECTIONS TO THE ELIMINATION OF FEDERAL FUNDS FOR THIS BEE RESEARCH FIELD LAB.

ON BEHALF OF THE NATION'S HONEY PRODUCERS, I URGE THIS SUBCOMMITTEE TO REJECT THE DEPARTMENT'S PROPOSED ACTION AND MAINTAIN ADEQUATE FUNDING LEVELS FOR THE MADISON BEE RESEARCH FIELD LAB IN THE FISCAL YEAR 1987 FEDERAL BUDGET. THANK YOU.

Mr. Akaka. The ranking Minority Member of the Appropriations Committee, the Honorable Silvio Conte of Massachusetts has requested insertion of the following statement in the record.

SILVIO O. CONTE
FIRST DISTRICT, MASSACHUSETTS

COMMITTEE ON APPROPRIATIONS
RANKING MINORITY MEMBER
SUBCOMMITTEES:
LABOR—HEALTH AND HUMAN
SERVICES—EDUCATION
TRANSPORTATION
LEGISLATIVE
EX OFFICIO MEMBER
OF ALL SUBCOMMITTEES

COMMITTEE ON SMALL BUSINESS
SUBCOMMITTEES ON
GENERAL OVERSIGHT AND THE ECONOMY

MIGRATORY BIRD
CONSERVATION COMMISSION

BOARD OF REGENTS
SMITHSONIAN INSTITUTION

Congress of the United States
House of Representatives
Washington, DC 20515

WASHINGTON ADDRESS:
2300 RAYBURN OFFICE BUILDING
WASHINGTON, DC 20515
PHONE: 202-225-5335

DISTRICT OFFICES:
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78 CENTER STREET ARTERIAL
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187 HIGH STREET
HOLYOKE, MA 01040
PHONE: 413-532-7010

April 14, 1986

The Honorable Jamie Whitten
Chairman, House Appropriations Subcommittee
on Agriculture, Rural Development and
Related Agencies
2362 Rayburn House Office Building
Washington, D.C. 20515

Dear Mr. Chairman:

Attached is a statement to our Subcommittee presented by Mrs. Frederick P. Stearns on behalf of Cooperative Extension in Massachusetts.

I would appreciate your assistance in making this statement part of the FY87 hearing record of testimony from public witnesses.

Thank you for your attention to this matter.

With best wishes, I am

Cordially yours,

Silvio O. Conte

Silvio O. Conte
Member of Congress

SOC:gm

April 14, 1986

The Honorable Jamie L. Whitten,
Chairman
The Subcommittee on Agriculture
House of Representatives
Washington, D.C. 20515

Dear Mr. Whitten:

The enclosed is a statement on behalf of Cooperative Extension.

As Chairman of the Subcommittee on Agriculture, I would very much appreciate your support.

Thank you for your assistance, your interest, and dedication to agriculture.

Sincerely yours,
Marie Stearns

Enclosure

A STATEMENT ON BEHALF OF

COOPERATIVE EXTENSION
UNIVERSITY OF MASSACHUSETTS, AMHERST

to the
United States House of Representatives
House Appropriations SubCommittee on
Agriculture

APRIL 14, 1986

Presented by

DORRIE STEARNS
7 Juniper Circle
Walpole, Massachusetts 02081

Dorrie Stearns is vice-chair of the Board of Trustees of Norfolk County Cooperative Extension; immediate past chair of the Massachusetts Cooperative Extension Advisory Council; a member of the University of Massachusetts College of Food & Natural Resources Advisory Committee; the National Extension Advisory Council; and the Council for Agricultural Research, Extension and Teaching (national).

STATEMENT ON BEHALF OF COOPERATIVE EXTENSION
UNIVERSITY OF MASSACHUSETTS, AMHERST

The Cooperative Extension System is a unique, time-tested nationwide partnership supported by three levels of government. It is exemplary of the most effective informal educational system in our land. This entire system is now threatened.

Cooperative Extension provides the connection between university research, the resulting knowledge base, and the citizen user. It is the largest non-credit, informal educational system in the country, providing educational programs for agriculture, families, communities, businesses, and natural resources. It is a partnership and a trust with the people of the nation, the states and local communities. Its citizens are involved in identifying priority needs, issues and problems to which the research and knowledge base of the land grant system can be applied. Its 4-H program is supported by more than 4,000 volunteers and serves 90,000 young people. Its Expanded Food and Nutrition Education Program works with over 2,000 low-income families and 14,000 children in specific sites across the Commonwealth. More than 200,000 families annually receive advice about home food production.

The uncertainties of funding, and the projected budget cuts affect not only each state but regions throughout the nation as a whole. For Massachusetts, the projected 2 million dollar reduction in the federal budget will severely impact our ability to operate Cooperative Extension. Specifically the reductions will:

- Eliminate the scope of the Expanded Food and Nutrition Education Program (EFNEP), which in Massachusetts, has reached 46,000 low income families and 219,000 children since 1969, with a significant resulting improvement in nutritional status.
- Limit the Integrated Pest Management Program (IPM), through which research findings providing alternatives to chemicals are demonstrated. In 1985, farmers and growers were able to reduce pesticides by up to 49% for certain crops. Additionally, by using IPM practices, 53% of farmers are spraying less.
- Constrain the Urban Gardening Program in Boston in which, over the past two years, 6,000 community and 4,200 home gardeners grew produce valued at $4.6 million. Over 1,200 soil samples from gardens, backyards and community areas were tested for lead content, and recommendations given for dealing with lead contamination. Incidentally, the City of Boston Lead Poison Control Center estimates that more than 30% of the children in Boston are afflicted with varying degrees of permanent mental disorders caused by lead poisoning.
- Create negative impacts directly on farmers and growers who depend heavily on programs such as agricultural engineering, farm safety, plant disease diagnostics, dairy herd management, small farm operations, and forestry and watershed management on which communities rely heavily to protect and expand their drinking water resources.
- Seriously damage our leadership capacity for 4-H youth programs, in which a network of volunteers deliver University knowledge, technology and leadership skills by involving youth in practical learning experiences.

- Limit our ability to involve families in learning situations to reduce family stress, develop income opportunities through home-based businesses, and gain improved parenting skills.
- And finally, reduce the opportunities for communities to improve economic development strategies, and for citizen groups to increase their skills in problem solving, policy formation and leadership.

Beyond these specific program impacts, the projected budget reductions will curtail the core or basic funding for the partnership which requires input from the Federal level as well as from in-state in order to function. Fiscal reductions will drastically impair the interchange of information between the federal partner and the states, which is essential to the process of rapid adoption of research concepts necessary in agriculture. Budget constraints would also limit the interchange of information and research between and among states, critical not only to each state's economy, but to regional vitality.

Beyond all of these considerations we would be severely limited in our ability to educate people to become self-sufficient; we would be constrained from helping citizens as well as farmers learn how to manage resources; we would have reduced capacity to utilize volunteers to expand program outreach, and to train future leaders for the state and the nation.

We support the FY87 budget recommended by the National Association of State Universities & Land-Grant Colleges, (NASULGC), which proposes that Cooperative Extension base programs be increased to 5 percent above fiscal 1985, and the restoration of Smith-Lever 3 (d) programs to FY85 levels. We support the increases for continued initiatives for water quality and management, farm financial management, and nutrition education.

We oppose any unilateral change in the wording of the Smith-Lever Act, that would limit Cooperative Extension's ability to serve the nation. Not only does Cooperative Extension serve agriculture directly, but indirectly as well, through rural community development, land use management, management of natural resources, and nutrition and family programs.

Let us remember that the strength of this nation lies in the knowledge and skills of its people, and in the wisdom of its leaders. It is the shared responsibility of government and higher education, particularly the land grant system, to provide opportunity for the life-long learning which insures that the heart of America, its agricultural, community and family systems, will continue intact and strong.

Cooperative Extension is an outstanding working example of federalism, combining local, state and federal resources in a strong partnership. The partnership operates a decentralized, locally-guided program that responds in a proven manner to local circumstance, while retaining sufficient flexibility to meet national priorities. When one partner withdraws or reduces support, the nature of the original and successful contract is destroyed.

The proposed reduction in funding for Cooperative Extension will adversely affect the citizens of the Commonwealth of Massachusetts, and the nation. Actions that inhibit knowledge transfer, impede technological adoption, and limit informed decision-making and management, cannot be consistent with a national goal of strength and progress as we turn the corner into the 21st century.

Thank you.

Mr. AKAKA. We would like to insert at this point in the record a statement of our distinguished colleague, the Honorable Ron Wyden of Oregon.

STATEMENT TO HOUSE APPROPRIATIONS COMMITTEE
HEARING ON FY 1987 APPROPRIATIONS
CONGRESSMAN RON WYDEN
APRIL 16, 1986

PUBLIC SAFETY AND THE FDA

Mr. Chairman, thank you for the opportunity to include my statement in the record of this Appropriations Committee hearing on FY87 appropriations. You have taken testimony about agencies and programs that provide services absolutely vital to the well-being of this nation's citizens.

I would like to focus on one agency -- the FDA -- and speak to the critical need for Congress to continue financial support of this key agency as well as to continue vigilant oversight of the way the FDA meets its mandate.

There is no question that the FDA's functions regarding the testing and approval of foods and drugs is essential to the health and welfare of all Americans. To that end, we cannot afford to cut funding corners which compromise the ability of the FDA to carry out its programs. The price of cuts which undermine FDA programs is far greater that the savings associated with them.

But funding alone may not be sufficient to ensure that the FDA sets its priorities appropriately and meets its goals in a timely manner. In fact, I have a specific example in mind of how the FDA is too tied up in less than urgent activity to act promptly in avoiding clear-cut public health hazards.

On March 5th last year, Senator Gore and I introduced a bill to ban the use of sulfites on fresh fruits and vegetables and fresh or frozen cut potatoes. The Gore-Wyden bill also called for FDA reevaluation of the safety of sulfites in other foods such as wine, dried fruit and seafood.

The question of public safety when sulfites are used has been with us for a long time now. In 1982, the FDA ruled that sulfites were safe. The agency made this ruling on the basis of a literature review even though at least six medical reports in the literature published between 1976 and 1982 showed that sulfites were dangerous.

When, in 1984, the FDA finally relooked at the question of sulfite safety, it recommended solving the problem through labeling. But the National Restaurant Association and the Center for Science in the Public Interest testified dramatically to the impossibility of solving the problem through labeling. After all, many of the people who are sensitive to sulfites don't know that before ingesting the chemical. Death, a real potential outcome of an allergic reaction to sulfites, is an unacceptable price to pay for lack of knowledge.

H.R. 1427, the Sulfite Safety Act of 1985, was introduced because the FDA did not act on the sulfite question although 15 sulfite-related deaths occurred between 1982 and mid-1985. And even now, with a clear expression of concern on the part of consumers, scientists, parts of the food industry, and Congress, the FDA still has not acted.

Specifically, although a preliminary rule on banning sulfites in fresh fruits and vegetables was published, we still do not have a final rule. And we don't have even a preliminary rule on fresh and frozen cut potatoes. Given this track record, I am deeply skeptical that the FDA will get around to reviewing the safety of sulfites in other foods.

It is this example of FDA foot-dragging that leads me to urge Congressional vigilance in two directions. First, FDA programs must be adequately funded. Second, Congress must exercise its oversight responsibility to the utmost. With both these actions, we can be far more certain than we are today that the FDA will meet its critical mandate to the well-being of all Americans.

Mr. **Akaka**. We would like to insert at this point in the record a statement of Mr. Jim Hightower, Commissioner of Agriculture for the State of Texas.

COMMISSIONER
OF AGRICULTURE
P. O. BOX 12847
AUSTIN, TEXAS 78711 · (512) 463-7435

April 18, 1986

The Honorable Jamie Whitten
United States
House of Representatives
2314 Rayborn House Office Bldg.
Washington D.C. 20515

Dear Congressman Whitten:

Agriculture is in a transitional period. Despite the current economic problems in the agricultural sector, both in Texas and nationwide, it is my belief that agriculture can be the force behind true economic development and growth. At the Texas Department of Agriculture, we have begun the long and difficult process of supporting a more diversified agriculture, one which will provide fair prices and profits to producers and generate hundreds of small and medium-sized enterprises that will bring new wealth, good jobs and a positive balance to Texas' economy.

The promotion of alternative crops is a major part of this diversification process. In the last two years, TDA has been helping producers in all parts of the state to take advantage of identified markets that already exist for these crops and their processed by-products. These crops promise real returns to producers in contrast to the net losses being suffered by some raising more traditional crops. While Texas may compete with other states for market shares for some crops, most market opportunity comes from projected growth in consumption, displacement of imports from abroad, or entirely new markets altogether.

I would like to enter into the record a report prepared by the staff of my Agricultural Development division on the prospects for alternative crop development in Texas. The profit potentials and economic activities outlined in this report are relevant nationwide. The specific crops and markets may vary, but the overall opportunity does not. I urge you and the Committee to consider ways in which federal policy can further the production and marketing of these crops. Preliminary recommendations are listed at the end of the report. Of special importance is the extension of Federal Crop Insurance to some of these crops. During the development stages when up-front costs are high, crop insurance can make the difference as to whether a new crop or industry can get off the ground.

Producers of all commodities must have accurate and timely market information to make reasonable and efficient marketing decisions. Market News, a joint federal-state responsibility, continues to meet this challenge and provide a critical service to agriculture nationwide. Attached is a brief statement by Rick Wahrmund, Director of Market News in Texas, concerning the proposal to finance the federal share of Market News expenditures through user fees. I urge you to oppose this approach and require consultation with the states before any major program alterations such as this are proposed by USDA.

Your consideration of these important policy issues will be greatly appreciated.

Best regards,

Hightower
JIM HIGHTOWER

JH:jvc
encl.

STATEMENT BY RICK WAHRMUND, DIRECTOR OF MARKET NEWS IN TEXAS CONCERNING MARKET NEWS SERVICE USER FEES

It is apparent that the Reagan Administration has plans for curtailing, eliminating, or charging for agricultural market news. This would be quite a blow to our farmers and ranchers, who are already suffering economically, should they be deprived of such market information.

We feel that the "user fee" program that USDA has proposed for the 1987 budget for funding Market News, instead of appropriated funds, is totally inconceivable. It is uncaring, insensitive, as well as an extra burden to the producers of this nation's food and fiber, if they are expected to pay for vital market information, which enables them to bargain with their buyers. Without the Market News Service, the farmer has nowhere to go for accurate or impartial information. He is constantly looking for more information to help him make the right decisions concerning the marketing of his product. Market News is the eyes and ears for the producer to help him make the most intelligent and timely marketing decisions possible.

The Texas Department of Agriculture went on record in May 1985, in a letter to the USDA-AMS Administrator James Handley, regarding the serious affects of "user fees" on producers, as well as our own Federal-State Market News Agreement. Because Texas is one of the leading agricultural producing states, and the Market News Service is a joint Federal-State effort, we had asked to be involved in any further discussions about changing the method of funding for the program and also be consulted before any major changes in the program were proposed to Congress. We have never received any reply to this letter. This Administration appears unwilling to hear how "user fees" will affect the struggling American farmer, only that they have to trim the budget. Evidently, Market News seems to be a good place to cut, because the

Administration has certainly turned their heads and not listened to the pleas from those of us who work daily and directly with those struggling farmers, trying to help them to get the most for their commodity by providing them useful information. We, at the state level, are very concerned for our producing farmers and know we cannot survive either, unless he is producing the livestock, grain, poultry or fruits and vegetables, that we place on our dinner tables each day. The producer cannot survive much longer at the low prices that they receive for their products and they certainly do not need the extra burden of having to pay for information that is vital to the marketing of their products.

Of course, the "user fee" program will affect the farmer the hardest, but it will also affect our Federal-State Agreement. The USDA proposes that it will need 15 million dollars to fund the "user fee" program. However, no fair and equitable means has yet been devised by the Administration, as to who will be required to pay for the service. They have no idea who or how much they need to charge for the information nor do they have any idea on the cost or manpower it will take for just the administration of the "user fee" program.

In six of the last eight years, the Texas Department of Agriculture has had a decrease in funds for our Market News Program. For many years the state of Texas has depended on oil revenue, but this is no longer the case, as a $2 billion loss in revenue for Texas is expected over the biennium. This has already caused budget problems in Texas and when the Legislature meets again in 1987, we definitely expect to see more cuts. Market News in Texas is already cut to the bone and some programs are barely hanging on from past cuts in funds. Our next step would be to dissolve those programs completely, which leaves the struggling producer uninformed on how or when to market his commodity. We have already felt the beginnings of "user fees" when Market News began charging for printed reports, in order to cover the cost of printing and postage. Texas ceased all printed reports except one, Texas Livestock Market News, and installed 3 toll-free telephone lines (2 of which are 24-hr recordings for livestock and grain and 1 which is answered by the market reporters to handle questions for all commodities) so the producer could call in and receive market news instantly. This is vital to the producer when he goes to market. We saw the mailing list of 35,000 drop to 3,500 because of a meer $10.00 per year subscription rate for the printed Livestock report in Texas. However, our toll free Livestock recorder line presently has 1,200 calls per week.

Our producers want all the information they can get to accurately market their commodity, but will not be able to pay for all these reports, if they cannot get a profitable price for their product anyway. They need to be informed in every way possible, and especially in times of low prices. How do we expect to charge someone who calls into the office or recorder for market information?

The total Federal-State Market News staff in Texas is 26 persons. Of that, 16 persons or 61% are state employees. A move by USDA to initiate "user fees" to fund the federal part of the Market News program, would certainly raise questions by the Texas Legislature, if these 16 state employees gather market information and then it is sold to the farmers and ranchers of Texas by USDA. I feel certain that the Texas Legislature will want to be reimbursed by the federal agency for no less than the amount of salary and expense incurred by the state reporters. As far as we know, USDA has failed to address this area.

This brings a question of whether the states will or can continue to participate according to the current Federal-State Agreement. The federal agency continues to pass the buck to the states to continue existing programs, with less and less money or people to collect this information. The states neither have current available funds nor any possibility of additional future funding for such programs.

The Texas Department of Agriculture and the state of Texas wants you to be aware of the seriousness of this problem. If the "user fee" program is initiated, the ability to obtain accurate and unbiased market information by which producers of this state and nation base their marketing decisions, will be in serious jeopardy. The agricultural sector is already in bad shape and to deny our producers of food and fiber information will surely make their situation much worse. It would be the most foolhardy economy to try to trim the federal budget by handicapping them further by denying, or for that matter, charging them for information vital to their marketing and planning strategy.

We are against the "user fees" for funding Market News and feel it is of the best interest of the agricultural industry that funds for Market News should continue to be appropriated.

ALTERNATIVE CROPS FOR TEXAS

The need for diversification in Texas agriculture, as in the rest of the Texas economy becomes more apparent daily. Price weakness and volatility of many traditional Texas farm products, compounded by increasing international competition and U.S. Government policies, are diminishing their economic viability and value to Texas. Yet Texas continues to grow as a market for all agricultural food and fiber products, especially processed goods. Much of this demand is being filled by imports from other states and from outside the United States.

Alternative crops offer a way to supply more of the Texas market with Texas production, retaining more economic activity within the state. The term "Alternative crops" here means simply those crops which could be produced in Texas but are not at present. They range from an existing crop being shipped into Texas to meet an existing market such as pinto beans, to an entirely new crop to produce speciality chemicals such as crambe.

Texas producers have historically had the foresight to diversify the agricultural commodities in which they produce. Many operators have also historically dedicated much of their land to the major commodity crops. Because of fluxuation in the market place (supply and demand), and increases in imports, Texas producers will continue to depend on alternative cropping to offeset losses and/or to insure over-all farm profitability.

Several commodities were initally targeted for review by the Texas Departments Agricultural Marketing Divisions Ag. Development program for their potential in Texas. This analysis included basic information gathering of existing research efforts by Universities and Governmental agencies. Building on to these past efforts staff highlighted the economics of the following commodities:

BLUEBERRIES

Blueberries are considered as a feasible crop for Texas due to several advantages over other southern states. First, there are currently no major insect or disease problems. Second, Texas is the farthest west of any state growing Rabbiteye Blueberries, which will provide a distinct marketing advantage. Third, Texas has a large growing population base including recent arrivals from other blueberry growing regions who bring with them knowledge of blueberries. Fourth, blueberries can be produced in Texas without the use of pesticides and can be brought to market several weeks earlier than berries produced elsewhere. Fifth, virtually an unserved market exists to the west and northwest of Texas, allowing for expansion beyond state borders.

Currently, Rabbit-eye blueberries are produced in South Carolina, Georgia, Florida, Alabama, Mississippi, and Louisiana. Only small acreages in Texas have been dedicated to blueberry production, however, past studies have indicated that yields of 9,000 pounds to 14,000 pounds per acre can be achieved. Since this is a perennial crop, yields will increase as the plant matures. With such horticultural potential, commercial blueberry acreage in Texas began to grow slowly. Over the past few years, however, the number of new plantings has been on the upswing. Currently there are about 300 acres of blueberries in Texas, 80 percent of which are under four years old, and in production units from one to five acres. Larger production units ranging form 50 to 100 acres are being initiated but are being implemented in a stepwise fashion requiring several years to complete.

The growing areas are limited to the acid sandy soils of East Texas. However, several other areas in West and Central Texas with sandy soil and good water quality have potential. Estimates for Texas suggest that several thousand acres are possible by the 1990's.

According to a blueberry study done by the Texas Department of Agriculture, Texas has an estimated market potential of $13,700,000.00 based on an average expenditure per household of $8.06. The impact of this amount of income in the East Texas economy could be expected to be some multiple of direct income to the growers which represents the responding of income for other purposes such as wages, automobiles, food, housing, clothing, etc. which is commonly known as the "multiplier effect" of economic development. Many economists believe that the the multipler effect may lead to a turnover of dollars in an economy approaching a multiple of seven before the effect of the new income is diluted. Taking a more conservative view of the "multiplier effect" and applying a factor of 3.5 times income to estimate economic impact in the East Texas area suggests that the economy could realize an increased level of activity approaching 74 million dollars per year. To capitalize on this commercial market opportunity, Texas producers potentially would need to plant 4,662 acres of blueberries with yields of 5,000 pounds per acre. This is based on Texas producers servicing 100 percent of the potential market.

Due to the nature of this crop, a producer would break even in the sixth year of production assuming land and equipment must be purchased and the producer is operating a 25 acre commercial scale production unit. Over a ten-year horizon, the average dollar return per acre is $1,753 and cash return on investment is 32.3 percent.

The economic returns are very attractive, and should prove encouraging to producers evaluating the potential for commercial-scale blueberry plantings.

CHRISTMAS TREES

The Christmas tree market here in Texas is currently in an infancy stage, for most producers have small acreages and sell most of their crop on a "choose-and-cut" basis. In 1985 Texas had 3,200 acres in production.

Christmas trees are a potential crop for Texas producers because 2.5 to 3 million trees are imported yearly. Primary states that supply Christmas trees to Texas are Minnesota, Michigan, Wisconson, Oregon and Washington. However, these northern states are beginning to feel the pinch of competition from Texas producers. According to Jim Chandler, Director or the Texas Christmas Tree Association, 300,000 Christmas trees were harvested in 1985, and sales were beyond the 3 million dollar mark.

Christmas trees are an attractive crop because the potential net return per acre ranges from $2,500.00 to $3,000.00 per acre. These returns are not realized until four years after planting (or the first harvest).

Advantages Texas producers have over their Northern competition include:

1. Proximity to the market, transportation advantages, and the producer can ensure product freshness.
2. Trees grown in the North take twice as long to produce. One drawback of Christmas tree production is the capital outlay upfront, causing a negative cashflow for several years.

Based on the 1985 import fiqures and an average retail price of $18.00 per tree this crop has the potential to realize a $54,000,000.00 contribution to the states economy assuming all trees were sold.

PINTO BEANS

Texas imports over 100 million pounds of pinto beans annually. Consequently, many Texas producers are considering pinto beans as a potential cash crop. Current production of pinto beans in Texas has been limited to test plots or small acreages; However, this scenario may soon be changing because several producers have discovered the potential of this crop and are actively working toward pinto bean commercialization in Texas. The beauty of the pinto bean crop is that it can be double cropped or alternated with wheat, providing a second cash crop for the farmer every year. According to a feasibility study conducted by TDA, the prime location for pinto beans is in the Panhandle area; however, pinto beans can be grown from this area down to Waco and west out to El Paso. The further south that pinto beans are planted, more often problems such as climatic conditions and disease occur.

Focusing on the agricultural and economic potential of this crop, 50,000 acres could be put into production based on yields of 2,000 pounds per acre. The economic dollar contribution ot the state would equal $24,000,000.00 based on an average wholesale price of $.24 per pound and assuming the total Texas market was captured. If each producer plants 100 acres of pinto beans, then roughly 500 farmers could benefit from this crop.

If commercial production of pinto beans were to materialize, Texas producers would experience several advantages over its competitors. First, due to the large amounts of pinto beans purchased and consumed in Texas, our producers would have a competitive edge due to locational factors. Second, the proximity to the main export market of Mexico would provide a great advantage over our primary competitors in Colorado, Idaho, and the Dakotas.

Several limitations are associated with pinto bean production. First, since there are low barriers to entry, this market is saturated and Texas producers must be able to withstand the shakeout of competitive states. Second, the 50-92 program has limited the acreage that could be planted in pinto beans. Third, intra-state trucking laws may limit producers who do not own their own trucks. Finally, marketing/channels of distribution will need to be set up for this new product, because a product cannot be sold of it never reaches the retail outlet.

Wine Industry

A new expanding industry across the state of Texas in the grape industry. In 1985 there were 3500 acres of vineyards, however, only 1500 acres were actually in production. Out of these 1500 acres approximately 3000 tons of grapes were produced and at a price of $600.00 per ton the gross income equaled $1,800,000.00 and estimated production costs run between $1,800.00 to $2,000.00 per acre. In 1985 the total sales of Texas wines were $9.7 million, and is expected to grow to $13.5 million in 1986. This projection translates to approximately 4250 tons of grapes required and the farmer would gross roughly $ 2.5 million anually based on a market price of $600.00. Since this crop is a perennial plant, yields will increase as the vines mature, this returns also would improve over time, given favorable market conditions exist.

In taking a look at the current and potential growth of this industry Texas, wine consumption patterns should be examined. Currently the adult per capita population consumes 1.9 gallons of wine. However, U.S. per capita in Texas consumption is 3.1 gallons and is projected to reach 5.4 gallons in 1990. It is also important to note that wine is the second fastest growing beverage in the country with consumption growing at a rate of 4 to 6 percent.

Even with consumption increasing in Texas and the United States it is important to examine foriegn and domestic competition. In the domestic arena, California (which is a $5 billion dollar industry), accounts for 90% of the domestic wines sold in the United States.

California has more than 500 of the 1,000 wineries in the United States since California producers are already established, their competitive advantage of lower overhead costs may hurt our Texas producer. This situation must be closely monitered. Considering foriegn competition, in 1982 the United States imported 121,000,000 gallons of wine and exported 9,000,000 gallons. Also 23.8 percent of the wines consumed in the United States were imports.

Assuming consumption of wine in Texas increases at a rate proportional to the U. S. consumption, Texas per capita consumption by 1990 would be 3.3 gallons. Based on this information and assuming Texas captures 100% of the domestic market, by 1990 the dollar contribution to the state would equal $264,000,000.00 annually. This figure is derived by holding current prices constant at $600 per ton.

As shown above, grape production has the potential to offer sizeable returns, however, barriers to enter this market are high. One barrier to consider is the start-up costs for a vineyard run between $7 and $ 10 thousand per acre. Next, returns and/or a breakeven point from such an operation are not realized until the sixth or seventh year. Therefore, such a venture in the short run is capital intensive but in the long run, such an operation has enormous potential.

NATIVE PLANTS

Native plants are being considered as a feasible crop in Texas for several reasons. First, the Texas nursery industry has grown enormously during the 1974-1984 decade the ornamental floriculture and nursery product industry experienced a 602% increase in wholesale sales. Second, with the rapid population growth, the potential market for native plants increased. In 1984, wholesale nursery sales reached $73,000,000.00 with about 75 percent of that grown and imported from other states. If native plants can assume parallel market growth with wholesale nursary sales, then based on 1984 figures, for every 1 percent penetration in the Texas wholesale market, native plant sales would be approximately 1 million dollars annually.

The native plant business is a growing part of the Texas nursery industry. A Texas Department of Agriculture survey of native plant growers in 1984 had 94 responses. The same survey, just completed, found 144 growers in the state--over a 50 percent increase.

The highway department has found that native plants can save taxpayer money. Their new approach of fostering native plant communities along highways allows more wildfowers and saves $8,000,000.00 in mowing costs.

Projections show a healthy future for native plants in Texas, however, continual marketing efforts are necessary to facilitate the growth of this industry.

MESQUITE

Cooking with mesquite wood has long been a tradition in indigenenous areas such as Texas, Arizona, and New Mexico. Yet the concept of mesquite cooking has only in recent years spread to other parts of the country. Due to an increased American interest in foods that are smoked, grilled and barbecured over natural woods, the flavor of mesquite cooked foods has gained explosive popularity nationwide. Consequently, mesquite wood is a potential alternative crop for Texas producers.

Since harvesting mesquite requires only a chain saw and pick-up trucks, this option may be attractive to small scale operators. Naturally, the size or capacity of an operation will dictate the sophistication of equipment required. Currently there are approximately five to six major manufacturers of mesquite in Texas and there is no count on how many small operators exist, consequently, the mesquite market is quite competitive.

The mesquite market is generally divided into four groups; the retail chip market; the retail chunk market; the restaurant chunk market; and the retail log market. Experts indicate that the restaurant chunk market is where the potential lies because the restaurant industry has had to accommodate increased consumer demand for mesquite-cooked foods, consequently this market experiences less seasonality than the other markets.

The market potential for mesquite is difficult to accurately predict because very little information is documented on the volume of mesquite wood harvested and sold in Texas. However, estimates reveal that this product contributes $9,000,000.00 to the State per year. Based on a study done by Rural Ventures, this market is increasing at a rate of 30 percent per year, consequently, by 1987 the economic impact of this industry could potentially reach $15,200,000.00 (based on an FOB price of $.10 per pound). The future of mesquite also looks bright because it is estimated that 12,000,000 acres of mesquite grown in Texas which converts roughly to a 25 year supply.

CRAMBE

Crambe is an excellent example of a potential new domestic crop able to satisfy certain needs. Currently the United States imports millions of pounds of vegetable oils such as coconut, palm, castor, tung, oitica, and rapeseed because their properties meet specifications for important industrial applications.

In the past, rapeseed oil has been imported from Canada and Europe as a source of erucic acid however, studies have shown that crambe seed oil has the potential to replace all imports of erucic acid rapeseed oil. This potential is based largely on the erucic acid content. About one-third of the seed weight is oil, and about 55 to 60 percent erucic acid when processed, verses rapeseed which has only 35 to 40 percent erucic acid. Crambe oil is the cheapest source of erucic acid, which performs better than any known material as a mold lubricant in continuous steel casting. It is also in demand for making "Nylon 1313", a tough form used in molded plastic, as an additive in plastic films to prevent sheets from sticking together and in plasticizers to keep them soft and flexible.

Search for potental crops to further diversify U. S. agriculture and provide new raw materials for industry, make crambe a desireable prospect.

This crop matures in 90 to 100 days and is capable of producing up to 2,000 pounds of seed per acre. It is a cool season or winter crop and can be grown, harvested and processed with conventional equipment and processes. Several attempts at commercialization production of crambe were thwarted by the lack of commercial markets for the oil and the lack of sufficient profitability when compared to alternative crops. Another reason crambe failed to measure up to other crops is because currently processing facilities are designed for rapeseed and to modify for crambe processing would require a sizeable capital outlay.

Crambe, however, is being reconsidered because most rapeseed countries are currently shifting toward production of low erucic rapeseed varieties, which is preferred for the edible oil market. Consequently, U. S. industries, in the near future, may suffer shortages of erucic acid and interest in crambe as a domestic source of erucic acid is expected to increase.

As stated earlier, large quantities of rapeseed is imported, however, rapeseed is also grown domestically. The primary areas of production include Washington, Oregon, Idaho and the Dakotas. Rapeseed is better suited for the climate, soil etc. of these areas verses crambe which is better adapted to areas of Southeast Texas.

According to experts, the potenial market for crambe it quite large. It is estimated that current demand for crambe can justify roughtly 50,000 acres for its production. Past studies in South Texas indicate crambe acheived competitive yields of 1000 lb/ac. The price and cost of production is similar to wheat, therefore at a price of roughly $ .10/lb. and a cost of $ 80.00 per acre, the net potential return per acre is $100.00 Therefore crambe has the potential to fuel the Texas economy by $ 9 million annually. Assuming producers planted 100 acres of crambe each, then this crop could benefit 500 Texas farmers.

JoJoba

JoJoba is a native American plant, presently grown on 42,000 U.S. acres. Aprox 30,000 acres are grown in Arizona and the balance is grown in California. No commercial production of JoJoba is found in Texas, only small acreages produced on a contract basis for cosmetic uses and test plots at various universities. JoJoba is very sensitive to freezing conditions, therefore Southwest Texas is primarily where JoJoba can be grown.

JoJoba is used as a replacement of sperm whale oil and synthetics because in 1971 imported sperm whale oil was banned, and other sources of oil where considered due to increasing pressures on diminishing supplies. JoJoba oils are used as feeder chemicals or raw materials for industry. This type of oil is unique for it is extremely viscus or slippery and does not break down under high pressures or temperatures. JoJoba oil is a high value, high quality oil and is specifically used in motor oils, gear lubricants, automatic transmission fluid, cosmetics, car and furniture polishes, waxes and leather finisher. Consequently, the market for JoJoba is unlimited due to its various uses.

This year 2-3 million pounds of JoJoba seed will be harvested, which translates to 500 tons of oil. A large portion of this harvest will be exported to Japan and Europe. Since JoJoba is a perennial plant, the yields will double as the plant matures. Therefore, by 1987 six million pounds of JoJoba seed potentially could be harvested and based on a price of $1.75 per pound for clean dry seed, this crop could generate $ 10.5 million annually within the state, assumming all seed produced is sold. It is currently difficult to determine the potential return per acre. Because producers lack expertise in this field, costs in the earlier years will be high but will gradually drop when cultural practices and managment improve.

JoJoba requires $ 10,000 per acre to establish and returns are not realized until the first harvest, which occurs in the fourth or fifth year after planting. Other variables add to the complexity of determining cost per acre.

Current limitations or barriers to commercial production of JoJoba in Texas include:

- it takes roughly three to five years before a return is realized (1st harvest) & takes several more years for yields to build to a profitable level;
- JoJoba no longer qualifies for the tax category of research & development, thus investors do not receive a tax break to offset the risk of investing. This has slowed actual crop planting;
- currently there is no mechanized way to harvest JoJoba due to varying maturity rates and the crop must be harvested by hand; and;
- this crop is a tender plant susceptible to extremely cold weather; thus freeze resistant varieties are being studied to suit various areas of Texas;
- all marketing/distribution channels will need to be developed; and
- since JoJoba is a substitute product without a track record, its ability to penetrate the market will determine the future demand.

JoJoba is at the beginning of becomming a reliable & profitable crop. It can be commercially cultivated with acceptable yields, and there is a great demand for this oil in cosmetic products as well as growing popularity in industrial processes, therefore the future for JoJoba looks promising.

KENAF

Kenaf - a cousin to cotton - is a woody, bamboo-like, fiber plant indigenous to Southeast Asia that grows 10 to 14 feet tall and can be substituted for wood in manufacturing high quality newsprint. Currently pulpwood is primarily used in U.S. newsprint mills, however, concerns for the future of pulp and paper supplies make Kenaf an attractive alternative. Below lists several developments that may effect pulpwood supplies.

a. an increasing ratio of annual removal to new growth of pulpwoods;

b. an increasing per capita use of paper and paperboard;

c. an increasing application of 'chip-N-saw' timber harvest that makes lumber from smaller trees formally used for pulpwood.

d. an increasing concern about the future supply of plastics (for which paper substitutes) as petrochemical supplies and costs become more critical; and

e. the conversion of timberland to other uses as the population grows and world food needs increase.

Due to the above concerns, Kenaf has received new attention as a potential supply of newsprint in the future. Newsprint is presently produced in the mills of Canada, the United States, and the Scandinavian countries and approximately 60 percent of the U.S. newsprint supply is imported from Canada. Consequently, production of Kenaf could aleviate dependence on imports and generate economic activity within the U.S.

Texas is prime Kenaf growing country and commercial production of this crop could create a new multimillion dollar industry for South Texas. The Valley has proven to be the opportune location for Kenaf production,because this area is blessed with year-round climate facilitating average yields of approximately 10 tons per acre.

From an economic viewpoint, Kenaf production and processing in Texas looks very promising. The rational behind this statement is:

1 to produce Kenaf requires standard farm equipment thus, no major capital outlay for equipment is necessary;
2 the price for Kenaf, an industrial fiber crop with a local market, will provide farmers a reasonable return on their land, management, and labor without being subsidized by taxpayers;
3 Kenaf grows anywhere cotton does and would allow struggling cotton farmers to plant a more profitable crop at a time when cotton prices are down and cotton surpluses are up;
4 commercial production of Kenaf could provide a savings to U.S. paper mills and newsprint users; and
5 processing Kenaf requires little modification within the mills and no new mill would have to be constructed.

Due to these positive aspects, Kenaf has the potential to help Texas producers as well as enhance our economic situation.

Current U.S. demand for pulp wood is 12 million tons annually. Only 40 percent of this wood is supplied by domestic sources, consequently, 7.2 million tons must be imported to meet this demand. If Texas producers were to capture 100 percent of the U.S. import market, 720,000 acres could potentially be planted, based on yields of 10 tons per acre. Also the state of Texas could realize an economic value of $216 million, based on a net potential return per acre of $300. Assuming the average size farm is 500 acres in size, 1440 farmers could benefit from this new crop.

From an economic standpoint, Kenaf production looks very attractive, however problems do exist in commercializing its production. First, most all U.S. newsprint mills are designed for pulpwood processing and are not ready to commit their processing to Kenaf for fears of unstable supplies. Second, storage is a problem because Kenaf is an annual crop and needs to be stored to ensure volume for year round processing, verses trees which are cut as needed.

ALTERNATIVE CROPS DEVELOPMENT

RECOMMENDATION

To fully capitalize on the opportunities presented to producers through the diversification of their operations into some of the alternative crops; government must be an active advoacate to changing and/or adding to existing federal, state and local programs to further these opportunities. This includes:

. Providing provisions for crop insurance

. Providing provisions for "Long Term" financing for alternative crops which take more than a year to produce a harvest.

. Provide provisions for financing acquistions or rehabilitation of facilities which would allow for the further processing of some of these crops to enable producer to capture the "Value added" profits inate in these operations.

. Provide provisions for the creation or enhancement of marketing programs to assist producers in the effective international market places.

. Provide provisions for the joint efforts of the private sector lending institutions to actively participate in the development of this "Value-Added" capacity in the U.S.

These provisions must be undertaken as a joint private sector, federal, state and local commitment to help american producers recapture and maintain a competitive position in todays world food market place.

Mr. **Akaka**. We have a number of statements from interested individuals who were unable to attend the hearing today. We would like to insert their statements in the record at this point.

THE OCEANIC INSTITUTE

TESTIMONY

U.S. MARINE SHRIMP FARMING PROGRAM

GULF COAST RESEARCH LABORATORY CONSORTIUM

by

WILLIAM C. ROWLAND, PRESIDENT

THE OCEANIC INSTITUTE

WAIMANALO, HAWAII

In FY86, 1.3 million dollars was appropriated to the Gulf Coast Research Laboratory Consortium to continue development of a United States Marine Shrimp Farming Industry. Our goal is the development of a U.S. industry capable of substantially reducing a one billion dollar annual import trade deficit in marine shrimp.

The Consortium, comprised of the Gulf Coast Research Laboratory, Tufts University, and the Oceanic Institute, has identified the "key" constraints to industry expansion in the United States. Successful competition by the United States against foreign imports is dependent upon improved management and marketing strategies, more advanced technology, and an improved business development climate. Without these improvements and advances, higher land, labor, and materials costs, and strict environmental regulations and controls in the United States will prevent substantial industry expansion.

From the very beginning, the Consortium has pledged to embrace the most effective people and the very best institutions in a cooperative effort to accelerate industry development. During the past few months, negotiations with Texas A&M University, Marine Shrimp Program; State of South Carolina, Division of Marine Resources; and Amorient Aquaculture International, have been completed, and cooperative research agreements developed. The Consortium is also working closely with the State of Hawaii, the University of Hawaii, and the University of Arizona, to develop additional cooperative agreements.

We are currently working to prepare a master plan for the development of marine shrimp farming in the United States. In preparation of that plan we found that most support of aquaculture development to date, has been directed to technology research through academic institutions. It is also clear that resources are spread very thin in attempting simultaneous development of several industries. While the work is laudable, it is clear to us that accelerated industry development requires additional attention to management, marketing, and business development climate problems. Similarly, we recognize the need to engage industry/business expertise at a much higher level. It is equally clear to us that marine shrimp is one of this country's outstanding aquaculture opportunities. The concentration of resources

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sufficient to achieve a critical mass in marine shrimp farming development, offers out best chance at success.

The Consortium program is then directed to industry development, rather than academic research. Private, commercial, government, and university communities are being joined in this marine shrimp industry development. Certainly we do not preclude basic research, but only if it has been identified as essential to industry development.

The benefits for our home state of Hawaii are substantial. We are in one of the "key" U.S. regions slated for expansion of the marine shrimp industry. We look forward to increasing amounts of top quality seafoods, and creation of new jobs, and new industry.

We are extremely grateful for the support we have been provided, and we welcome the opportunity to continue this important work.

Thank you for giving me the opportunity to testify.

ASPCA

America's First Humane Society

ara Pequet
Director of Government Relations

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Statement for the Record

for

The Committee on Appropriations

Subcommittee on Agriculture, Rural Development, and Related Agencies

submitted by

Barbara Pequet

Director, Government Relations

April 21, 1986

THE AMERICAN SOCIETY FOR THE PREVENTION OF CRUELTY TO ANIMALS
Headquarters: 441 East 92nd Street • New York, N.Y. 10128 • (212) 876-7700

The American Society for the Prevention of Cruelty to Animals, the country's first private humane association, submits these comments for the record on behalf of our 200,000 contributors. We urge continued support for the enforcement of the Animals Welfare Act through the USDA's Animal and Plant Health Inspection Service and request that the agency be appropriated at least $6,648,850 for FY 87.

Since the passage of the Animal Welfare Act twenty years ago, Congress, recognizing the important role this legislation plays in preventing abuse to animals in research laboratories, cirucses, zoos, and puppy mills, has amended and expanded the minimum protections offered several times. (tr) Eventhough the Animal Welfare Act does not protect animals from all aspects of research or testing done in the laboratories, it does ensure that millions of animals receive appropriate food, water, and housing while being confined. When vigorously enforced, these provisions comprise the single best federal law protecting these animals from abuse.

Enforcement of the law, of course, must be thorough, continuous, and consistant. Only APHIS has the authority to investigate complaints and alleged violations, register and inspect research laboratories and facilities, and license and inspect dealers, carriers, handlers and exhibitors of animals. Only APHIS can bring about some of the protections the public is increasingly interested in assuring to animals. To achieve its long-standing mandate, the Office of Management and Budget's request for zero-budgetting must not prevail. The agency must by refunded at FY 85 levels with additional funds for new responsibilities.

Only five months ago in December, 1985, Congress recognized that duplicative efforts in research are costly in the long run and adopted through the Improved Standards for Laboratory Animals, provisions to set up an Information Service at the National Agriculture Library. This service will cut down on the cost to taxpayers for duplicate testing by government agencies. The total requested appropriations, amounting to less than $7 million, includes the $750,000 needed to fund this new mandate from Congress to prevent waste while reducing animal suffering.

The ASPCA is thankful for this Committee's support for this one-of-a-kind program over the past years when OMB has recommended elimination of Aphis' budget. We respectfully request this minimum appropriation of [redacted] $6,648,850. for FY 87.

A STATEMENT ON THE NEED FOR SUSTAINED AND INCREASED RESEARCH SUPPORTED BY APPROPRIATE FUNDING FOR THE AGRICULTURAL RESEARCH SERVICE/USDA AND in particular for the:

Crops Research Laboratory, ARS/USDA
Department of Horticulture
University of Wisconsin
Madison, Wisconsin

U S Food Fermentation Laboratory, ARS/USDA
Department of Food Science
North Carolina State University
Raleigh, North Carolina

Department of Agricultural Engineering, ARS/USDA
Michigan State University
East Lansing, Michigan

This is a statement in behalf the members of Pickle Packers International, Inc., St. Charles, Illinois 60174 on the occasion of the Hearings April 14-15-16, 1986 of the Agriculture, Rural Development, and Related Agencies Subcommittee on Appropriations Congress of the United States.

Your courtesy in providing us with an opportunity to present this statement is gratefully acknowledged. Pickle Packers International, Inc. is a voluntary trade association representing the makers of pickled vegetables. Many minor horticultural crops are involved including as well as pickled cucumbers, onions, carrots, cauliflower, tomatoes, peppers, okra, green beans and other vegetables. The organization represents participants accounting for more than 87 percent of the tonnage in North America and has members in twenty nations.

Ours is a small industry in the total of agri-business. However, it does provide useful diversity to the overall farm income picture. More than 750,000 tons of pickled cucumbers are eaten annually in U.S. The pickled pepper business is increasing and is now estimated to be more than $125 million at consumer level. This manufacturing business for the combined total of these minor horticultural crops is estimated to return at least a quarter of a billion dollars per year to growers. It makes work for more than ten thousand families and even more when the jobs in related industries supplying containers, spices, vinegar, machinery, etc are combined

The main emphasis we wish to make is the story that is familiar to you. That is that fundamental agricultural research is lagging far behind all other Federal research programs. Defense, Space, Energy and many other Federal programs are getting the majority of the support. We compliment your Committee for the work it is doing to call attention to Congress for the need for basic agricultural research. The "farm problem" needs the application of technology not for yield increases but for utilization based on new products. We have been told that funding for ARS, with calculations for inflation subtracted, remains at the 1966 level. We praise and thank you for all that you are doing to increase the total funding for Agricultural Research Service of USDA.

It is disturbing to report that operating budgets of some of the ARS/USDA professional scientists that we know about are being reduced. They are grateful for the funding, materials, acres, machinery that we can provide in the cooperative effort. However, the pinch is getting greater. This is particularly true at the Crops Research Laboratory at University of Wisconsin. In the case of the onion, carrot and pickle crops research at University of Wisconsin, the field trials are being scheduled for every other year instead of annually. The whole program is in a much reduced state. The program of cuts for future years will virtually eliminate the work. There are many professional scientists at work in the major commodity crops. There are very few in the minor horticultural crops. A critical review of this is documented in an excellent paper in HortScience, October 1985 titled "Public Programs on Genetics and Breeding of Horticultural Crops in the United States!" Data in the tables in this paper show an anticipated reduction in the genetics and breeding of many horticultural crops between 1983 and 1990. It was reported that if one assumes that those programs reported to be maintained through 1990 were the only ones to be maintained, there would be a 50.1% reduction in number of programs between 1983 and 1990 and a 39.4% reduction in Full Time Equivalent positions in this field of science. This is calculated to be a 43.1% reduction for Full Time Equivalent positions in vegetable crops, and a 22.6% reduction in number of vegetable programs. This decline comes at a time when the population is expanding and will need improved horticultural crops. It is ironic that the germplasm collection, preservations, and evaluation program will continue to be emphasized in the future, but there may not be sufficient breeders working with horticultural crops to utilize this germplasm to its full potential. The inability to use this germplasm could have serious long term national consequences. Even more serious, is the fact that ARS/USDA policy threatens the incentive of public plant breeders.

The request for increased funding for the onion, carrot and pickle crops research at ARS/USDA at University of Wisconsin is important for these and other reasons:

1) The research relates to ARS needs because it provides long term objectives not receiving attention from other projects, provides professional training and addresses long-term uncertain pay-off.
2) The requested support is appropriate because many effective SAES programs have been discontinued and the few remaining industry breeders generally do not initiate long-term objectives or train professional plant breeders.
3) The existing program is well located at the University because adequate laboratory, greenhouse, and field resources are available. Personnel from diverse disciplines, graduate students and the University environment provide the best possible facilities, equipment and personnel for the research objectives.
4) Current technology available in the University environment is useful in adopting related disciplines and can be quickly adapted to stated objectives.

A final comment in this area deals with the fashionable swing to genetic engineering. The facts are that genetic engineering is an additional tool for the conventional plant breeder to use. It will not replace that person.

Varieties do not step out of a test tube.

In this statement we have emphasized plant breeding because at the moment, this program is the most threatened. We wish to report outstanding progress in the cooperative work with the U.S. Food Fermentation Laboratory. A new system called closed tank pure culture fermentation is rapidly moving from the pilot plant to the commercial transition state. The benefits in improving product quality, reducing effluent, reducing sodium level and the potential for reduction of energy use are promising and provide hope that this ancient and honorable art of pickling can turn into the science of pickling. The fundamental research involved is built on almost 50 years of cooperative work between the industry, the State of North Carolina and the ARS/USDA. We take this opportunity to thank your Committee for your leadership in providing the umbrella research coverage within which industry could pick up technology and apply it for the benefit of growers and consumers.

Thank you.

A STATEMENT ON THE NEED FOR SUSTAINED
AND INCREASED RESEARCH
SUPPORTED BY APPROPRIATE FUNDING FOR
THE AGRICULTURAL RESEARCH SERVICE/USDA
AND in particular for the:

U.S. Food Fermentation Laboratory, ARS/USDA
Department of Food Science
North Carolina State University
Raleigh, North Carolina

Presented by the National Kraut Packers Association, Inc., St. Charles, Illinois 60174 on the occasion of the Hearings of U.S. House Appropriations Subcommittee on Agriculture, Rural Development and Related Agencies, Chairman, Rep. Jamie Whitten. (April 14-15-16, 1986)

This is the first time our industry has asked to present a Statement. We gratefully acknowledge the opportunity to present these views and express our concern for the fate of ARS/USDA.

The National Kraut Packers Association, Inc. was formed in 1907. It is a voluntary trade association representing the makers of sauerkraut. More than 75 percent of the tonnage produced by the industry is represented by the association.

Annual production of sauerkraut averages about 200,000 tons. This accounts for a per capita consumption of approximately 1.5 pounds. About 30,000 acres are devoted to this crop each year primarily in New York, Wisconsin, Ohio and Oregon.

The technology required for fundamental research is clearly far beyond the capability of the sauerkraut industry. We see the existence of centers for research established by the federal government as essential for the survival of small industries such as ours.

Very complex chemical constituents are involved in cabbage. Greater utilization of this crop can make a valuable contribution to the diet. It should be remembered that early Colonists "wintered over" using kegs of kraut to provide a source of Vitamin C. And the exploring ships coming to the New World relied on sauerkraut as a source of Vitamin C during the lengthy two to four month sea voyages to prevent the passengers and crew from becoming sick with scurvy. By streamlining the fermentation process and learning more about the complex microbiological system we have the hope of making the end product of the fermentation of shredded cabbage more appealing to a greater number of consumers. This can prevent the industry from shrinking, continue to provide employment in this field of endeavor and keep the industry up to date. We need the help of the U.S. Food Fermentation Laboratory. We appeal to your Committee to make sure that this exceptional facility is adequately maintained and expanded.

This is to express concern for the fate of one of the most important federal research agencies, the Agriculture Research Service/USDA. With the farm problem calling for billions of dollars for credit, for the sustaining of the farm economy during this perilous time, it makes good sense to invest in technology to increase the cost effectiveness of commodities and more important to increase the utilization of farm crops.

In the past, it appears the farm community has not fully recognized the value of fundamental research fearing that it simply meant increased yields. Much creative work has been done on biomass conversion by the ARS Laboratories to make agriculture the source of chemical feedstocks which it was prior to the emphasis on petrochemicals. We are pleased to see mention of this work in the latest six year redirection program by ARS/USDA. Congratulations to your Committee for your leadership in this area and we believe this deserves greater emphasis, higher priorities and the support of every farm group in the nation.

Thank you for the opportunity to present these views, submitted in behalf the industry by the Research Committee, NKPA, Inc.

Defenders
OF WILDLIFE

STATEMENT OF SUSAN HAGOOD
WILDLIFE MANAGEMENT SPECIALIST
DEFENDERS OF WILDLIFE
HOUSE COMMITTEE ON APPROPRIATIONS
SUBCOMMITTEE ON AGRICULTURE
FY87 BUDGET FOR THE ANIMAL AND PLANT HEALTH INSPECTION SERVICE
EXTENSION SERVICE
AGRICULTURE STABILIZATION AND CONSERVATION SERVICE
APRIL 21, 1986

Defenders
OF WILDLIFE

Thank you very much, Mr. Chairman, for the opportunity to express the views of Defenders of Wildlife with respect to the FY87 USDA budget for the Animal and Plant Health Inspection Service, the Extension Service and the Agricultural Stabilization and Conservation Service. I am Susan Hagood, Wildlife Management Specialist for Defenders of Wildlife. I would like to request that my entire statement be incorporated into the Record.

Defenders of Wildlife is a "new face" before the subcommittee. Our interest in the budget of these USDA agencies stems primarily from the December, 1985 transfer of the Animal Damage Control (ADC) Program from the Department of the Interior's Fish and Wildlife Service to USDA's APHIS.

Defenders is a national, non-profit conservation organization with more than 79,000 members. Our goal is to preserve, enhance and protect the natural abundance and diversity of wildlife and the integrity of wildlife ecosystems. We support the protection and recovery of threatened and endangered species, the preservation and enhancement of our national wildlife refuge system and the promotion of wildlife management philosophies which benefit all wildlife.

Defenders of Wildlife is perhaps best known for its active role in the wise management of predators, including grizzlies, wolves and coyotes. Our long history of concern for the protection of indigenous predators as indispensable components of wildlife communities has resulted in decades of involvement with the federal Animal Damage Control Program, which has primary responsibility for the reduction of predator damage to domestic livestock. While we recognize that predation, caused primarily by coyotes, is a genuine and very serious problem for some livestock producers, Defenders believes that the answer to the problem of livestock predation does not lie in the simple reduction of coyote populations. Unfortunately, such an approach has characterized the Animal Damage Control Program throughout its history and has generated the long and continuing controversy that surrounds it.

Defenders recognizes that for the approach to livestock protection to move away from massive predator killing, there must be safe and effective alternatives which will protect livestock from predators. We have therefore supported research on promising alternatives to lethal predator control. Research on one such alternative, the use of livestock guarding dogs, is currently underway in Oregon and in Coryell and Crockett Counties, Texas. This research, funded for the past three fiscal years within the Animal Damage Control Program on the recommendations of Defenders of Wildlife, is proving that these dogs can be of tremendous assistance in protecting domestic livestock from predation.

When the ADC Program was in the Department of the Interior, there was an absence of any mechanism for conveying information to livestock producers about effective alternative predator control techniques, such as livestock guarding dogs. Now that the Program is in USDA, that problem has in part been remedied.

Defenders recommends that the Extension Service, whose Committee on Policy has formally expressed an interest in a role in the ADC Program, be provided a substantive part in the program and a portion of the FY87 ADC budget to enable it to carry out that role. The long history of Extension Service cooperation with American farmers and livestock producers in a constant effort to provide them information about the latest and most effective agricultural techniques, and the credibiltiy that the Service enjoys with the agricultural community, makes it ideally suited for this role.

As you know, the President's FY87 Budget contained $10,000,000 for the new USDA Animal Damage Control Program. This figure represents an approximate 50% reduction in funding from that which the Program has received in recent years. Defenders recognizes that this is a substantial reduction which may have negative impacts for some of those associated with the Program.

However, in recognition of the need to reduce the federal deficit and the mandate to do so imposed by the passage of the Gramm-Rudman-Hollings Deficit Reduction Act, Defenders of Wildlife supports the President's proposal for funding for the Animal Damage Control Program. Our recommendations for FY87 funding for the ADC Program will therefore work within the $10,000,000 level requested by the Administration. If incorporated into the ADC budget for FY87, these recommendations will require a very small portion of the budget while contributing toward its long term cost effectiveness.

ANIMAL DAMAGE CONTROL PROGRAM BUDGET RECOMMENDATIONS

RESEARCH -- $345,000

Minnesota Livestock Guarding Dog Research	$45,000

Defenders strongly recommends that $45,000 for the continuation of Minnesota livestock guarding dog research be earmarked within the FY87 ADC research budget.

In 1985, $45,000 was added to the FY86 ADC budget to initiate a proposed two-year research program to determine whether livestock guarding dogs can protect Minnesota livestock, primarily cattle, from predation by the threatened eastern timber wolf. The use of livestock guarding dogs offers one solution to wolf predation on domestic livestock that is acceptable both to the Minnesota livestock industry and those concerned with wolf recovery.

Dr. Ray Coppinger of the New England Farm Center of Hampshire College in Amherst, Massachusetts, is the foremost livestock guarding dog researcher in the country today. He and his wife Lorna, also a livestock guarding dog researcher, have directed the Oregon and Texas livestock guarding dog programs. The data they are accumulating from these programs is forming the foundation of a nationwide livestock guarding dog network which seeks to ensure that the breeds best suited for guarding U.S. livestock are used and that only the best individuals are bred. Their work is also refining training techniques and contributing toward the current 80-90% success rate of Oregon livestock guarding dogs.

Funds for the FY86 Minnesota livestock guarding dog program will, once allocated, go in part to the New England Farm Center. Pups have already been placed with young cows at the Farm Center to begin the social bonding process, a critical stage in the training of a successful guarding dog. These pups will then be moved to Minnesota and placed with cooperating farmers to begin their work as livestock guardians. Their numbers will be augmented by additional dogs bred at the Center and in the state. The success of each dog will be closely monitored by livestock producers, Minnesota researchers and the Coppingers.

Conditioned Taste Aversion	$300,000

Defenders recommends that $300,000 in the FY87 ADC research budget be earmarked to support the third year of conditioned taste aversion research.

Conditioned taste aversion research is currently underway in Arizona, California and Nevada. This unique method of alternative predator control attempts to teach coyotes that sheep are not good to eat.

In the evolutionary process, selection favors those organisms able to associate the consequences of toxin consumption with specific flavors. As a result, after one or two experiences in which food consumption is followed by gastrointestinal illness, most organisms demonstrate a learned taste aversion -- they reject the previously palatable flavor as disgusting. This type of learning is found in virtually every organism from slugs to humans.

When taste aversion is applied to the coyote/sheep conflict, sheep carcasses or mutton baits are laced with lithium chloride, a naturally occurring salt. Shortly after consumption, a coyote becomes quite sick and remains so for several hours. After recovery, the coyote may immediately cease to kill sheep, or, depending upon the extent of its prior experience with sheep, may try to kill once or twice before a strong mutton aversion is established and it switches to other prey.

Taste aversion is used with great success in parts of Canada. The method is extremely inexpensive and easy to use. But research conducted on the technique in this country has thus far raised nearly as many questions as it has answered. Defenders has therefore supported a proposed five-year study to answer these questions and determine if this is indeed a viable predator control technique. The research, funded for the past two fiscal years, is conducted by Dr. Carl Gustavson, the foremost expert on conditioned taste aversion in this country and Dr. Debra Forthman Quick. The project is administered by the Center for Environmental Studies at Arizona State University.

EXTENSION INTEGRATED PEST MANAGEMENT SPECIALISTS

Northwest Region (Oregon, Washington, Idaho)	$60,000

Defenders recommends that $60,000 be earmarked within the budget of the ADC Program to pay the salary and expenses of an Extension IPM Specialist who will assist agricultural producers in Oregon, Washington and Idaho with damage caused by vertebrate pests.

From FY84-86 Congress and the State of Oregon appropriated nonrecurring funds for a pilot project designed to provide livestock guarding dogs to Oregon sheep producers suffering losses to coyotes, and to closely follow the success of each dog. This project is demonstrating that livestock guarding dogs can be a valuable asset in the effort to control predation. In 1983, five Oregon sheep producers added guarding dogs to their operations. In 1984 and 1985, 40 more producers began using the dogs. By December of 1985 there were nearly 100 guarding dogs on 60 Oregon ranches. Data collected in 1984 indicate that 88% of adult livestock guarding dogs helped to reduce losses; 58% achieved a perfect (zero losses) or near perfect (less than two losses) record. It is estimated that guarding dogs saved Oregon livestock producers $50,000 in 1984.

The Oregon livestock guarding dog program is administered by the Extension Service at Oregon State University with a combination of state and federal funds. Jay Lorenz, formally of the New England Farm Center's Livestock Guarding Dog Program, is the Extension Specialist in charge of the program. This program is enjoying widespread support throughout the state from the Extension Service, the livestock industry and enviromentalists.

As a result of the success of the Oregon program, producers in neighboring states are expressing a desire for a similar program. Recent meetings with Extension officials have resulted in a proposal to expand the responsibilities of the Oregon Extension Specialist to include Washington and Idaho. While the emphasis of the Extension Specialist will initially be on implementing a livestock guarding dog program in the three states, other information on reducing damage caused by vertebrate pests will be collected and distributed in keeping with the proposal to ultimately provide agricultural producers a comprehensive program of vertebrate damage control.

Wyoming	$50,000

Defenders of Wildlife recommends that $50,000 be earmarked within the budget of the ADC Program for the salary and expenses of a Wyoming Extension IPM Specialist who will assist agricultural producers with damage caused by vertebrate pests.

Wyoming livestock producers and Extension officials have also expressed interest in a Extension specialist to provide assistance to producers and information on alternative predator controls. Most alternatives, like livestock guarding dogs, electric coyote proof fencing, and changes in livestock husbandry techniques offer the kind of long-term solution to predation which simply killing coyotes, the traditional approach of the ADC Program, cannot.

AGRICULTURE STABILIZATION AND CONSERVATION SERVICE BUDGET

ALTERNATIVE PREDATOR CONTROL INCENTIVE PROGRAM

Northwest Region and Wyoming	$100,000

Defenders recommends that $100,000 ($50,000 for the Northwest Region $50,000 for Wyoming) be earmarked within the budget of the Agriculture Stabilization and Conservation Service. This money should be used in an incentive program to provide financial assistance to livestock producers wishing to implement alternative techniques, but lacking the financial resources to do so.

Defenders recognizes that many alternative techniques, such as livestock guarding dogs and electric fencing, require financial investments by livestock producers. In contrast, government-sponsored lethal predator control services are provided at little if any cost. Even if lethal control offers only temporary assistance at best, there is a financial disincentive to choose an alternative technique.

We therefore recommend the establishment of an incentive program to assist livestock producers interested in adopting alternative predator control or wildlife damage control techniques which require a financial investment. Such a program should contain a revolving fund of $50,000 each for the Northwest Region and Wyoming.

Thank you very much, Mr. Chairman, for the opportunity to present the views of Defenders of Wildlife to the Subcommittee. I would be happy to provide Members of the Subcommittee with additional information on any of these issues.

Statement

Pharmaceutical
Manufacturers
Association

GERALD J. MOSSINGHOFF
PRESIDENT

PHARMACEUTICAL MANUFACTURERS ASSOCIATION

ON

THE FISCAL YEAR 1987
BUDGET ESTIMATES OF THE FOOD AND DRUG ADMINISTRATION

FOR THE

SUBCOMMITTEE ON
AGRICULTURE, RURAL DEVELOPMENT AND RELATED AGENCIES

COMMITTEE ON APPROPRIATIONS

U.S. HOUSE OF REPRESENTATIVES

APRIL 16, 1986

The Pharmaceutical Manufacturers Association represents more than 100 research-intensive companies engaged in the discovery and development of new pharmaceutical products.

The new drugs developed by PMA member companies must be approved by the Food and Drug Administration before they can be marketed in this country. The FDA proposes, as part of its Fiscal Year 1987 budget request, to collect user fees from companies for reviewing and approving New Drug Applications (NDAs).

According to an FDA "Talk Paper" of February 5, 1986, the agency's budget request would include $424 million in appropriated funds and $26 million collected through product-approval fees charged for FDA review of NDAs. "Such fees have been proposed before but not implemented and would be largely directed to improving the drug approval process," the paper states.

At a hearing before the Subcommittee on April 8, 1986, FDA Commissioner Frank E. Young said the agency is "developing a legislative proposal to authorize the collection of such charges for our review of new product applications, not under authority of the User Charge Act, but under specific statutory authority...We are fully cognizant of the Committee's past guidance on user charges, and that is why we are developing a new, separate legislative proposal, to allow for full legislative review of the issue."

This legislation has not yet been submitted to Congress, or otherwise been made available for review and comment. We believe it would be premature for the Congress to approve user fees until the accompanying legislation can be considered.

The President's budget anticipates that the first $11.4 million the FDA collects in user fees would be applied to support existing operations in the area of new-drug approvals. If legislation authorizing the collection of user fees is not enacted, therefore, there would be an actual reduction from current operations in new-drug approval activities. Therefore, PMA believes that the FDA's appropriation for FY 1987 should be increased by at least $11.4 million so the agency's current activities in approving new drugs can be sustained, whether or not user-fee legislation is approved. In fact, PMA believes that FDA's FY 1987 appropriation should be increased by more than $11.4 million to ensure that vital new-drug approval operations are enhanced, whether or not user-fee legislation is enacted.

At this time, PMA has very little hard information about the specifics of FDA's user-fee proposal. The remainder of this statement, therefore, will focus in a general way on user fees and will spell out the essential provisions that any user-fee legislation must contain.

The expeditious approval of new life-saving and cost-effective medicines by FDA is of critical importance to public health, and both the FDA and PMA are committed to streamlining the drug-approval process. To this end, PMA would support user fees if the fees were reasonable; specifically targeted to improving the drug-approval process; additive to FDA's regular funding, and part of a multi-year commitment to improve the drug-approval process.

The need for the timely approval of new drugs is vividly demonstrated by the delay in approving beta-blockers--an important class of cardiovascular drugs--in this country. The delay in the United States, in comparison with the earlier approval of these drugs by other developed countries with sophisticated drug-approval systems, caused unnecessary deaths, pain and suffering in this country.

Beta-blockers are widely recognized as one of the major therapeutic advances of the modern era. "It is now clear that beta-blockers are one of those infrequent advances that revolutionize the practice of medicine," Lawrence K. Altman wrote in The New York Times on February 2, 1982.

Beta-blockers were approved for the treatment of cardiac arrythmias in the United States in 1968, three years after they were approved for that use in the United Kingdom. They were approved for the treatment of angina in the United States in 1973, seven years after they were approved for that use in the United Kingdom. They were approved for the treatment of hypertension in the United States in 1976, seven years after they were approved for that use in the United Kingdom. And they were approved to reduce the risk of death for heart attack victims in the United States in 1981, six years after they were approved for that use in Sweden.

In announcing the approval of a beta-blocker to treat heart-attack victims in November 1981, Dr. Arthur Hull Hayes Jr., then FDA Commissioner, said that, as a result of the approval, 7,000 to 10,000 lives could be saved a year in the United States. Beta-blockers had been used to prevent second heart attacks in Sweden since 1975.

Delay in approving new drugs also undermines the incentive for developing them, as Henry Grabowski, Professor of Economics at Duke University, has pointed out, most recently in a speech in Washington on February 13, 1986. Generally, Grabowski noted, it takes more than 10 years for a new product to reach the market, at an average cost of $94 million. The average new drug needs 12 years of net revenue to break even at an 8 percent real interest rate, he said, and 19 years to break even at a 10 percent rate.

"Another basic finding of our research," Grabowski continued, "is that breakeven lifetimes are highly sensitive to regulatory delays. We found, for example, that if regulatory delays could be reduced by one year, the average breakeven time for new drug introductions would be reduced by three to four years. This striking result reflects the time value of money. In other words, given an interest rate of eight to ten percent, up front marketing delays and lost sales opportunities count for a lot more economically than additional revenues at the end of the product life cycle."

Under Commissioner Young, the FDA has intensified its efforts to streamline the drug-approval process--and significant progress has been made. In 1985, the agency approved a modern record of 30 New Molecular Entities (NMEs). However, a great deal remains to be done.

For example, in 1962 Congress established a 180-day statutory deadline for approving new drugs, but that deadline has been virtually ignored ever since. In recent years, the mean time required to approve NMEs has ranged between 28 and 39 months, with the mean about 32 months in 1985. For the most therapeutically important NMEs, the mean approval time more than doubled during 1982-1985, rising from 14.4 months to 29.5 months. In addition, the backlog for NMEs has grown by more than 80 percent since 1981.

To help the FDA improve the drug-approval process, PMA established a special Board-level Committee in July 1984 to work with the agency. The PMA Ad Hoc Committee on FDA Issues formed working groups that have focused on six major areas: electronic data transmission; agency-industry communications; more effective use by FDA of outside advisors; decentralization of some of FDA's functions; the FDA environment and facilities, and funding. Cooperation between the FDA and the working groups has been excellent.

Because the expeditious approval of safe and effective new drugs is important to public health and the research-based pharmaceutical industry, PMA would support empowering the FDA to impose user fees for processing NDAs under carefully-drawn guidelines. As I have said, the user fees would have to be reasonable; specifically targeted to improving the drug-approval process; additive to the FDA's regular funding, and part of a multi-year commitment to improving the drug-approval process.

Under these criteria, a user-fee program would help to expedite the approval of new medicines to save lives, ease suffering and reduce health-care costs.

As information is not available at this time to enable the Subcommittee to determine just what the Administration's proposal entails, we urge that the Subcommittee prohibit the collection of user fees, as it did last year, until such time as authorizing legislation may be thoroughly considered and enacted. After that, we would, of course, be pleased to work closely with the Subcommittee on this matter.

Medical Research Modernization Committee
11 West 60th Street, New York, N.Y. 10023 • (212) 247-8120
Reply to : 1 Pine Street, Neptune, N.J. 07753 • (201) 922-2600 • Toll-free 800-631-2212

Richmond C. Hubbard, M.D.
Chairman

April 14, 1986

APR 21 1986

The Honorable Jamie L. Whitten, Chairman
Committee on Appropriations
House of Representatives
Washington, D.C. 20515

Dear Mr. Whitten,

I appreciate your invitation to address the Agriculture, Rural Development, and Related Agencies Subcommittee on Appropriations and regret that another committment bars my attendance. Accordingly, please accept this statement for placement in the record as you suggested in your letter of April 3.

The Medical Research Modernization Committee, which I chair, is composed of some hundreds of health professionals united to advance the adoption of the many modern methods of medical research, testing and education which are now available. Our group is not "anti-vivisectionist" but the members do agree that the use of animals, particularly in testing pharmaceutical products, is antiquated and continues, as does any form of technology, primarily through inertia. We should like to underline the fact to the members of the Appropriations Committee that once the testing of a drug on a gamut of animal species has been completed, the effect on humans is still unknown and the drug must be tested on humans.

To obviate the risks now attendant on the distribution of pharmaceutical drugs to the public, our members make two initial proposals:

First, we believe it appropriate that the Committee on Appropriations request the FDA to make a report,covering the past ten years, on all pharmaceutical drugs released for human consumption and later withdrawn due to human death and injury. That report should include a description of all tests made prior to release and marketing, including the numbers and species of animals used, plus a detailed description of the methods of testing on humans, the controls established, and the like. The report, we recommend, should be published for public review.

Second, following comment on the above published report, we urge the Congress to (a) take a direct interest in the adoption of non-animal methods of testing drugs rather than allocating this authority to the bureaucracies, and (b) to endorse and appropriate specific funding and plans for verifying the safety of new drugs released for human consumption. To be more precise, the FDA should be required to establish a central office in which computers would record the needed data on each patient for whom a select group of physicians is permitted to prescribe a new drug, including data on the patient's background and illness, reports as to the effect of the drug, including side-effects, etc. Such centralized reports will not only give a better base for judging the drug's efficacy but will also reduce the death and injury rates by permitting earlier withdrawl of some drugs from the market.

Respectfully submitted,

Richard C Hubbard MD

NCA
NATIONAL
CATTLEMEN'S
ASSOCIATION

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Testimony on Behalf of the

NATIONAL CATTLEMEN'S ASSOCIATION

regarding
U.S.D.A. Budget

before the

Agriculture, Rural Development, & Related Agencies Subcommittee
on Appropriations
U.S. House of Representatives
Chairman Jamie Whitten

submitted by

National Cattlemen's Association

April 21, 1986

The National Cattlemen's Association is the national spokesman for all segments of the nation's beef cattle industry--including cattle breeders, producers, and feeders. The NCA represents approximately 230,000 professional cattlemen throughout the country. Membership includes individual members as well as 51 affiliated state cattle associations and 18 affiliated national breed organizations.

INTRODUCTION

The National Cattlemen's Association firmly supports efforts by Congress and the Administration to reduce Federal spending. The long-term success of agriculture and most other industries is at stake. The Federal government competes with private sources for capital and inevitably raises the cost of doing business.

In the comments that follow, the nation's cattlemen clearly indicate that they are willing to take cuts in government programs conducted in part for their benefit. We believe that this can be done without harm to our industry or to the public provided that the programs and services of the highest priority be kept intact and those of low priority be deleted or reduced.

By and large, our comments pertain to the budget for the United States Department of Agriculture.

RESEARCH AND EDUCATION

A. Agricultural Research Service (ARS)

NCA supports the proposed budget increases for ARS of $35 million. While keeping with its basic research mission, ARS has been very responsive to the research needs of industry, including the cattle industry.

ARS continues to operate in over 130 locations in this country and abroad. This number of locations is excessive and leads to inefficiency. Certain ARS locations are held together by tradition and political support. We urge Congress to seek the advice of ARS administrators and agricultural producers to identify those ARS locations which should be closed and/or merged with more substantial ARS facilities. In these situations, the facilities lack a "critical mass" of scientists to function productively. Savings from such reorganization could be applied to high priority research needs.

While we remain supportive of ARS due to their general responsiveness to industry and the efforts to streamline administrative procedures, we nevertheless are extremely disappointed that the appropriation of funds to animal science is continually substantially less than similar appropriations to plant science. Farm income from the sale of animals is approximately equal to income from the sale of plant products. Yet plant research receives more than double the amount of support from ARS. This is an inequality that cannot be allowed to continue. It has never been explained to our satisfaction why this disparity exists.

If funds for plant science are to be increased disproportionately compared to animal science, then ARS should at least place additional emphasis on range plant research - an area of research that has been neglected. Research on the basic physiology and morphology of range plants is needed.

B. Cooperative State Research Service (CSRS)

As in the proposed budget for ARS, the proposed budget for CSRS illustrates an inequality between animal and plant science. In this case, FY'86 funding for plant sciences was three fold higher than for animal science and, to add insult to injury, the proposed increase in funding for FY'87 is nine-fold higher for plant sciences than for animal science. Animal agriculture is not receiving the attention it deserves. We request the Congress direct CSRS to develop a logical and satisfactory explanation of this inequity.

Furthermore, the only sources of funding for animal health research (a combination of special grants and sec. 1433 funds) has again been deleted by the Administration. This has become an annual event. Meanwhile, animal health researchers are left in limbo, not knowing from year to year if their research efforts will be supported. This is an especially poor time to discourage long-term investigation into complex disease processes that represent the next frontier in animal health research. A long term and reliable source of funding is desperately needed. Until it is established, funding for animal health research through CSRS must be restored.

C. Extension Service (ES)

The Agricultural Extension Service has served a critical role in the development of American agriculture, and ES can continue to play a critical role if some rather drastic changes are made. Agriculture has become much more sophisticated with a greater reliance on technology. The National Cattlemen's Association agrees with the findings of the Office of Technology Assesment (OTA) report entitled "Technology, Public Policy and the Changing Structure of American Agriculture". The report clearly illustrated the changes that are occurring in agriculture and the changes that will necessarily occur in the future. Greater emphasis will be placed on technology management and information management. If the Extension Service is to secure continued support from the National Cattlemen's Association, it must adapt to these changing needs.

In order to facilitate innovation on the part of the extension service, we recommend the development of a competitive grant program as a means to restore some funding to the extension service that has been deleted by the Adminstration. This would serve to stimulate the more ambitious and innovative extension groups to cooperate in the development of a genuine plan that addresses the real needs of contemporary agriculture. NCA is not prepared to recommend a specific amount of money to be placed in a competitive grant program, but we encourage Congress to consider this as an alternative.

FEDERAL AGRICULTURE COMMODITY PROGRAMS

A. Grains Programs

The National Cattlemen's Association has adopted policy to reduce the role of the federal government in agriculture commodity programs. NCA opposes artificially tampering with the price of basic feed grains. The cattle industry is the single largest user of feed grains and artificial prices for grain adversely impacts on our ability to compete in the market place. NCA does not have a cheap grain policy. We welcome higher agricultural commodity prices, but we emphasize that increases should be a result of market influences.

B. Dairy

As with feed grains, the NCA is actively opposed to dairy programs which adversely impact on the free market of the beef industry. NCA is strongly against the use of $1.1 billion of tax payers money being used to send dairy cattle to slaughter, as in the case of the existing whole-herd buyout. We recommend that the Appropriations Committee actively question any such future subsidy to slaughter programs.

INTERNATIONAL PROGRAMS

Foreign Agricultural Service

The activities of the Foreign Agricultural Service are some of the most important and productive of all programs in the USDA. We commend the FAS for its willingness to work with the private sector in helping to devlop new markets overseas for agricultural products.

The cooperator program is a real success story. The NCA believes the availability of funds for the cooperator programs be high priority within the USDA budget.

Exports are absolutely necessary. The NCA believes the FAS should give added emphasis to high-value and value added products such as beef.

The U.S. Meat Export Federation is the major livestock cooperator representing the red meat industry in pursuing new and expanded markets for red meat. The MEF is utilizing its cooperator funds very efficiently.

SOIL AND WATER CONSERVATION PROGRAMS

Hold FY'86 levels on Great Plains Conservation Program, Agricultural Conservation Program and Small watershed Program. Vital to conserving soil and water in light of 1985 farm legislation for Conservation Acreage Program.

FOREST SERVICE

Forest Service Rangelands

Hold FY'86 budget line.

SMALL COMMUNITY AND RURAL DEVELOPMENT

NCA is generally supportive of the USDA budget outline for programs under this area. Particularly:

1. NCA supports the continued movement of funds in the Farmers Home Administration (FmHA) programs from direct loans to loan guarantees. The guarantee plan should encourage private lenders to work actively with borrowers to restructure loans.

2. NCA supports converting the Federal Crop Insurance Corporation over to a re-insurer of private insurance companies.

3. NCA supports and encourages the use of the interest buydown program which works hand-in-hand with the loan guarantee program.

MARKETING AND INSPECTION PROGRAMS

A. User Fees

The President's budget proposes the implementation of user fees in several program areas to cover the costs of these programs.

The NCA has established policy that opposes user fees for programs that are mandated by law for the public benefit.

The proposed user fees for meat inspection is a perfect example of the kind NCA opposes.

In addition to our basic opposition to meat inspection user fees, we object to the FSIS proposal to charge $3.40 per head slaughtered. The FSIS believes this assessment will be passed through the system. We believe this fee will be unfairly passed back, not forward, to the cattle producer.

Other user fees proposals must be evaluated on their individual merit.

B. APHIS

The NCA is in general support of the APHIS budget proposal. There are a couple of areas, however, where we have some concerns.

The Administration proposes to keep funds for the Brucellosis eradication program at about the same level as previous years. We believe the agency should have ample discretionary authority to distribute these funds to where they will do the most good to carry out and accomplish the objectives and goals of the program.

We do, however, object to the use of indemnity funds being used in infected herds that are participants of the whole-herd buyout plan of dairy provisions in the 1985 farm bill.

The NCA does support spending cuts in APHIS programs. However, many of the activities undertaken by APHIS are done by necessity and often on an emergency basis. It is not easy to plan or budget for such activities.

We believe there should be a contingency fund. This fund would be available for disease outbreaks or other unforeseen emergencies.

Testimony of the National Cotton Council
Submitted to the
Subcommittee on Agriculture, Rural Development and Related Agencies
of the House Committee on Appropriations
April 18, 1986

SUMMARY OF REQUESTS

USDA-EXTENSION:	Extension formula program: Restore to $240 million
	Extension pest management program: Restore $1.55 million for earmarked funds for boll weevil management program and add $200,000 for additional states with weevil problem. Total requested for Extension's pest management program $7.73 million.
	Extension pesticide impact assessment program: Restore $1.72 million.
USDA-CSRS:	Restore CSRS budgets including Hatch formula, competitive and special grants to $288.7 million.
USDA-APHIS:	Add $650,000 for federal share of Carolinas boll weevil eradication program containment and buffer zone maintenance.
	Restore $1.1 million for 1987 efforts for the Western boll weevil eradication program.
	Restore proposed $200,000 cut in Texas High Plains boll weevil containment program to level of $900,000.
	Restore $1.3 million for support of cooperative federal/state pink bollworm program to $2.3 million.

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The National Cotton Council is the central organization of the U. S. cotton industry, representing growers, ginners, warehousemen, cottonseed crushers, merchants, cooperatives and manufacturers from California to the Carolinas.

At the Council's annual meeting in February, the 297 delegates selected by 90 separate state, regional and national organizations strongly endorsed expanded agricultural research and education programs. In a unanimous resolution, they expressed continuing support for "...appropriations for cotton and cottonseed research and extension programs conducted by USDA and Cotton Belt states —

including ginning and other processing -- that provide for efficient program growth to adequate levels, recognizing that such action is not inflationary and will produce public benefits far in excess of its costs."

We vigorously support a balanced reduction in the federal deficit. However, we recognize that agriculture cannot accomplish this task alone, or even a major part of it. But, we are willing to do our part because reducing the federal deficit is the surest way to continue to bring the dollar into a more favorable relationship with other currencies and make us more competitive in world markets.

Another pressing issue interrelated with the deficit and improved competitiveness is public investment in research and extension. We feel that maintaining an adequate research and extension budget for agriculture is a competitive necessity and represents a sound national investment that will pay dividends far in excess of its cost.

Recognizing the need to reduce government spending, we have reluctantly accepted a no-growth budget for agricultural research and extension for several years. This was done with the expectation that funding for essential projects would be provided in the future. However, we are compelled to recommend several adjustments in USDA's proposed FY 1987 budget.

Extension

Extension Service programs are proposed to be cut 59%. This untimely reduction comes in the midst of a survival crisis for agriculture when the need for extension support is great. Formula funds for states are proposed to be cut substantially and critical special programs are to be eliminated completely. We urge restoring formula funds to the 1986 appropriated level of $240 million.

With elimination of the special extension programs, funds for the highly important extension pest management programs are thus cut. Within that program we are requesting $1.75 million for earmarked funds for boll weevil management. This includes $1.55 million for 11 boll weevil states currently receiving earmarked funds for boll weevil management and $200,000 for additional states which are now infested with the weevil but were not originally named in the program. We therefore request funding for earmarked funds of $7.73 million for the total extension integrated management program.

Also eliminated from Extension's budget were funds for pesticide impact assessment. The continued evaluation of agricultural chemicals under the pesticide impact assessment program is essential to agricultural productivity, profitability, farm safety and protection of the environment. We ask restoration of $1.72 million for this program to the 1986 appropriated level.

Agricultural Research Service

The Agricultural Research Service (ARS) is proposed to receive a 2.6% increase over the 1986 appropriations. We appreciate the slight increase for the Department's in-house research agency, even though it is considerably below the proposed 16% total increase for other federal research and development obligations. We feel strongly that agricultural research should receive a higher priority for funding than it is now getting.

Cooperative States Research Service

The Cooperative States Research Service (CSRS) plays a vital role in bringing together state agricultural experiment stations, industry and the federal government to form the ideal partnership to provide answers to America's agricultural problems.

The CSRS budget is slated for a decrease of 15% from the 1986 appropriations. Though Hatch formula funds are proposed to receive level funding, special grants were completely eliminated. Special grants programs include such efforts as research for National Integrated Pest Management and support of the Pesticide Impact Assessment Program. With the elimination of the special grants, the primary burden of supporting these important programs will be shifted to states and funds from Hatch Act appropriations. Nearly all special grants programs, though they may be conducted at a single state location, are regional and national in scope and are in the nation's interest. We therefore request full restoration of CSRS budgets, including Hatch, competitive and special grants to at least the 1986 appropriated level of $288.7 million.

Animal and Plant Health Inspection Service

Council delegates also endorsed continuation and expansion, where appropriate, of pest management and eradication programs administered by the Animal and Plant Health Inspection Service (APHIS).

With regard to APHIS programs, farmers in North and South Carolina are highly pleased with progress toward eliminating the weevil in their states. Weevil numbers have been virtually eliminated except for the buffer area, a zone in which, by definition of its function, weevils are expected to migrate from adjacent infested states.

This boll weevil effort is an outstanding example of cooperative programs among federal and state research, APHIS' action programs, cooperative extension, industry, state regulatory agencies and farmers. The program has demonstrated that areawide suppression and eradication programs are indeed effective in reducing farmer's costs and are thus in the nation's interest.

No funds were requested in APHIS' proposed budget for federal share of maintaining the containment and buffer area. We therefore request $650,000 to cover a 30% cost share of this phase of the Carolinas' boll weevil eradication program.

Growers in Georgia, Alabama and Florida have expressed high interest in expanding the boll weevil eradication program to their states. Alabama has passed a referendum in which a two-thirds majority of affected growers voting requested the boll weevil eradication effort be conducted in their state. Georgia growers are planning a referendum this spring and growers in Florida are also laying groundwork for their participation. Upon grower approval, action will be taken for a start-up in Georgia, Alabama and Florida for early 1987. An additional $8.85 million will be needed in 1987 to cover the government's 30% cost share of this program.

With the increasing threat of the weevil in California and Arizona, a boll weevil eradication program was implemented in the spring of 1985 for parts of Arizona, Southern California and Northwestern Mexico. No money for support of this program was proposed in the Administration's budget for 1987. Funding of $1.1 million is needed for continuation of efforts in the Western states.

The weevil program in the Texas High Plains is a joint USDA and farmer effort established in 1964 to keep the weevil from becoming established in that area. It is an ongoing program and is highly successful with farmers investing heavily to keep the weevils out. The proposed $200,000 cut in this program needs to be restored to the 1986 appropriated level of $900,000.

The FY 1986 budget proposal includes a cut which would eliminate most of the cooperative federal-state quarantine program and other pink bollworm program activities. The cooperative federal-state program has worked well for many years and APHIS' role in it is essential. The proposed $1.3 million cut in this vital program should be restored to bring the total APHIS support for this program to the 1986 appropriated level of $2.3 million.

SOUTHWEST ANIMAL HEALTH RESEARCH FOUNDATION

May 2, 1986

Honorable Jamie L. Whitten
Chairman, Subcommittee Agricultural, Rural
Development and Related Agencies
Room 2362, Rayburn Building
Washington, D.C. 20515

Dear Mr. Whitten,

This testimony is related to the screwworm program and the interest of the Southwest Animal Health Research Foundation (SWAHRF) to get proper funding to continue the elimination of the screwworm fly beyond the Isthmus of Tehuantepec to the Darian Gap of Southern Panama.

The SWAHRF is a non-profit organization of representatives of most of the livestock organizations in the Southwest and Mexico. SWAHRF trustees meet regularly with the joint U.S. and Mexico Commission for the eradication of the screwworm fly to monitor the progress of the screwworm fly eradication program; and the needs of the commissions as to funding and producer participation.

This testimony is based on information given to SWAHRF by APHIS in response to certain questions posed to them, and is reported in a similar context.

1. Why does the livestock industry seek to extend the screwworm eradication program to Panama?

Screwworm is one of the most devastating of all livestock pests. In my opinion, the cattle industry in the Southwest would have difficulty surviving the economic losses such as we had prior to the eradication program. Apart from the benefits that would be afforded the countries of Central America, the likelihood of reintroduction of screwworms into the United States would be greatly lessened with a sterile fly barrier at the Isthmus of Panama.

2. If we are funded at the $28 million level which was requested in the President's budget, what will this do to eradication efforts in the Yucatan Peninsula, Belize, and Guatemala?

Only a barrier program could be maintained at this level of funding.

3. What is the minimum amount of money you can maintain the barrier with and at the same time begin to eradicate the remaining areas of Mexico?

$31.589 million (the same as FY 1986).

4. How much will it cost to build the plant in Panama? Will it have sufficient fly production to also eradicate the Caribbean Islands? When would it be built?

$10-12 million.
Yes.
Architectural and engineering work will start in FY 1987, if funds are available.

5. Do we have any indications that the quarantine and dipping stations are more effective than last year?

Yes. Less outbreaks, more animals being detected with screwworm and being quarantined at the stations. However, no quarantine line can be 100 percent effective.

6. Are you keeping sufficient field inspectors in the north of Mexico to be sure that if we do have an outbreak it will be detected fairly soon?

Yes. We will reduce numbers but maintain sufficient to detect outbreaks.

7. What is the status of the Texas plant, and is the plant continuing to be maintained at the same level?

Personnel levels have been reduced to the minimum, but the plant is being maintained at the same level of readiness.

8. How would a screwworm outbreak in the United States be handled?

The agency maintains special task forces in each region to respond to animal health emergencies. In the event of a screwworm outbreak in the United States, the agency would activate the appropriate unit, and would begin the immediate importation of sterile flies from Mexico. If the outbreak occurred on a large scale, the agency would also establish quarantines on animal movement through exposed areas. In responding to the threat, the task force would draw on the technical expertise available in the Mexico program and elsewhere within the agency. The agency also has agreements with the military providing for additional support in such areas as maintaining quarantines or providing veterinarians in the event of an emergency.

Thank you for the opportunity to submit this testimony to your committee. We feel confident that you will be able to help us achieve the goal of the complete elimination of the screwworm fly.

Sincerely,

Jack H Hagler

Jack H. Hagler
Secretary,
Southwest Animal Health
Research Foundation
P. O. Box 5040
Arlington, TX 76005

Statement By

Alabama Poultry & Egg Association
Arkansas Poultry Federation
Delmarva Poultry Industry, Inc.
Florida Poultry Federation
Georgia Poultry Federation
Kentucky Poultry Federation
Mississippi Poultry Association
National Broiler Council
National Turkey Federation
North Carolina Poultry Federation
Pennsylvania Poultry Federation
Poultry Industries of Louisiana, Inc.
Southeastern Poultry & Egg Association
Tennessee Egg & Poultry Association
Texas Poultry Federation
United Egg Producers
Virginia Poultry Federation

Submitted to House Appropriations Subcommittee on
Agriculture, Rural Development, and Related Agencies

Wednesday, April 30, 1986

RE: THE NEED FOR ADDITIONAL POULTRY DISEASE RESEARCH CONDUCTED IN A HIGH CONTAINMENT FACILITY

For many years avian influenza has been a relatively mild disease of turkeys in many parts of the United States. In 1983, avian influenza (AI) virus gained access to the chicken industry and had a devastating effect. Losses included $66 million for an eradication program and incalculable losses to poultry producers, feed suppliers, and other areas of agribusinesses associated with the poultry industry. The outbreak of this disease in the poultry industry had a major impact on export losses of farm commodities.

In 1985 there was a re-occurrence of AI in five Northeastern States; as a result of concerted efforts by state agencies, APHIS and the poultry industry, this outbreak now appears to be under control. The poultry industry still faces the threat of AI, and as recently as last week virus isolations were made from two live dealer flocks in Ohio and New Jersey. Within the past few weeks, the presence of AI virus was confirmed in specialty birds in Oregon.

The last major national outbreak of Newcastle disease was in 1972. This outbreak cost the federal government $56 million for eradication. Industry losses from this disease outbreak were similar to losses incurred by the poultry industry as a result of the avian influenza outbreaks. Reintroduction of exotic Newcastle disease occurs through smuggling of exotic birds into the extensive U.S. pet bird market channels.

Both Newcastle and avian influenza are a continuing serious threat to the U.S. poultry industry. At this time there is an outbreak of exotic Newcastle disease in parrots in New Jersey. The distributor of these parrots has shipped exotic birds to a dozen states. Costs to the federal government for eradication of these two diseases has exceeded $100 million in the past 12 years. This figure does not include the millions of dollars of losses suffered by the poultry industry.

The poultry industry needs research to utilize emerging technologies to develop more rapid and sensitive procedures to isolate and identify the viruses to their antibodies. Alternative approaches to slaughtering needs to be explored for the successful eradication and control of the diseases. Novel vaccine approaches and anti-viral therapy must be examined as possible alternatives. Of critical importance is the need to develop precise biochemical techniques to define the potential disease-causing capability of a virus. For example, we must be able to separate with great precision high pathogenic viruses from low pathogenic viruses. The hazard posed by infected and recovered flocks needs to be precisely defined. A critical need is to develop a regimen of avian influenza control that would allow the broiler industry to function and remain profitable in an environment contaminated with an avian influenza virus.

The poultry industry needs the Agricultural Research Service (ARS) to continue research on both of these diseases. Although ARS has been highly responsive to the needs of the poultry industry, it has only one laboratory conducting research on exotic poultry diesases. In order to do research on avian influenza, ARS had to stop the research on Newcastle disease because research cannot be done on both of these diseases in the same laboratory.

If there is any "mixing" of the viruses, there is the risk of getting a new type of hybird virus containing properties of both Newcastle and avian influenza.

The Agricultural Research Service's Southeast Poultry Research Laboratory has the specialized facilities required to raise and house disease-free chcken flocks for use in this research. This facility has the required chemistry laboratories, specialized laboratory equipment, and other requirements needed to support a high containment operation. The fact is, however, that the 12-year-old building is too small and can only accommodate one exotic disease at a time. Unfortunately the poultry industry currently faces threats from two exotic and costly diseases.

A high containment facility is an absolute necessity for research on these two viruses without endangering the poultry industry. Because of the danger to the poultry industry, the Animal and Plant Health Inspection Service (APHIS) does not permit these type viruses to be used in any facility that does not meet high containment requirements. The industy fully supports these APHIS regulations. A high containment facility is one that is constructed and operated so that the viruses cannot escape from the facility.

For many years ARS' poultry disease research group has done an outstanding job of providing research to help poultry and egg producers. We know ARS has the scientific expertise to do research on both exotic Newcastle and avian influenza. Both diseases are serious threats to the poultry and egg industry, each having the potential to deal devastating blows, especially in high density poultry producing areas. We are told by ARS that an additional high containment facility is necessary in order for the agency to conduct a continuing research program on both AI and VVND. The cost of such a facility is estimated to be about $2.5 million.

The poultry and egg industry feels there is an urgent need for additional research on AI and VVND. If this can only be accomplished through the construction of an additional high containment facility, we respectfully urge Congress to recognize the seriousness and danger of these diseases to the U.S. poultry industry and appropriate the necessary funds.

House of Representatives
Agriculture, Rural Development and Related
Agencies Subcommittee on Appropriations

Testimony of Jeanette Jamieson, representing the Southeastern Association of Resource, Conservation and Development Councils; National Association of Conservation Districts (NACD) RC&D Committee; Georgia Association of Conservation District; Georgia RC&D Council; Chestatee-Chattahoochee RC&D Council; and as a member of the Georgia House of Representatives.

Southeastern Association of RC&D Councils comprised of: Georgia, South Carolina, North Carolina, Mississippi, Alabama, Florida, Virginia, Tennessee, Kentucky, Maryland and Puerto Rico.

I appreciate the opportunity to submit testimony to this Committee. The members of my association have long recognized the fact that this Committee has led the Congress of the United States in the support of this grass-roots rural development program.

Resource, Development and Conservation council volunteers understand that they have the opportunity and responsibility to:

"Expand opportunities for conservation districts, local units of government, and individuals to improve their communities.

Expand views, ideas, activities, and program efforts to achieve more prosperous and attractive communities.

Use prudently, manage and protect natural resources, with full consideration of the social and economic benefits to people, as a fundamental requirement for improving the quality of life. The full development of human resources also is essential.

Assist local leaders in assuming responsibility for their area's development.

Assisting local people in bringing to bear all available political, social, and economic forces to aid in the area's improvement and development.

Providing thru the RC&D program an approach for carrying out the objectives of the U. S. D. A. for Rural Development.

Provide initiative and leadership in all phases of Resource Conservation and Development project activities as part of the responsibility of local people that cannot be assumed by others."

The outstanding record of RC&D Councils across the country in carrying out the above objectives has resulted in considerable economic impact and a track record beyond measure in providing a delivery system which meets rural American needs. These needs are best identified by the RC&D Councils - home folks - serving as a grass roots organization to get things accomplished.

Outstanding examples of successful RC&D Projects across the country have proven what can be accomplished by dedicated volunteers using the $26,000,000.00 we have received annually as seed money:

An outstanding example is the Eastern Shore RC&D program in Virginia, where a council of sixteen volunteers, some traveling some forty-five miles to attend meetings have taken an investment of $336,600.00 of RC&D funds and thru the completion of 17 projects expanded this "seed" money to an investment of over $10 Million.

it would be indeed difficult to find another "Volunteer" program in the country that can number among its members local government, farmers, professionals, working together to achieve an effective combination of Federal, State and local resources in order to meet the needs of rural areas across the county.

These volunteers strive to meet their obligations and needs of this program at the local level. They, along with all of us, recognize the crucial necessity of a balanced federal budget; however, our feeling is that we cannot undo in four years what has taken decades to develop without bringing programs like ours to their knees. Recognizing the fact that we will have limited financial assistance from the federal government in the future, many of our RC&D Councils across the country are forming non-profit corporations in order to seek funding from private foundations. This is another indication of an innovative approach of our people to the solution of the problem at the local level.

I encourage this Committee to continue the funding of the RC&D Program at the 85-86 budget level. We recognize the fact that without the support of this Committee our Program would not exist. For this support we thank you.

Jeanette Jamieson, President
Southeastern Association of
Resource, Conservation and Development
Councils

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Written Testimony of National Rural Housing Coalition Appropriations Subcommittee on Agriculture, Rural Development and Related Agencies -- Fiscal 1987 Appropriations

The President's Fiscal Year 1987 will bring to an end federal rural development program administered by Farmers Home Administration (FmHA). FmHA administers loans, grants and related assistance for housing and community facilities for low income rural people and their communities. The President proposes to transfer responsibility for these areas to the Department of Housing and Urban Development (HUD).

Both rural housing and community facilities have been greatly reduced in previous fiscal years. Rural housing lending was reduced by about 40% in FY '86. A proposed rescission of $700 million will bring the '86 reduction to 55%. Loans and grants for community facilities have fallen from about $1 billion annually in 1980 to less than $500 million in fiscal 1986.

If the FY '86 rescission is not approved, FmHA will assist over 74,000 disadvantaged and elderly families and FmHA housing assistance will create over 75,000 jobs in rural America. Some 800 rural communities will also receive loans and grants to provide clean drinking water.

Rural Housing Production
(FY '80 - FY '86)

FY	Units Produced	Rental Assistance Households	Appropriation
80	134,642	20,000	$4.220
81	113,356	17,655	$3.941
82	99,846	14,280	$3.883
83	81,290	11,750	$3.446*
84	79,499	11,750	$3.439*
85	75,464	15,250	$3.452*
86	59,972 (est.)	15,163	$2.343

($ in billions)

*Up to 20% of funds unspent or transferred to farm program.

The Administration also proposes an end to the rental assistance programs which provides essential subsidies to very low income households living in federally financed rural rental housing. Over 15,000 low income and elderly families will face sharp increases in rents or eviction if the President's request is approved, as authority for their rental subsidy will expire in FY '87.

Beyond the fact that over 2 million rural families are living in substandard housing, there is a serious lack of mortgage credit in rural areas. Nationally, per capita deposits in rural savings and loans are only about half of that of metro areas and 500 rural counties have no federally chartered S&Ls. Where private credit is available it is generally at higher rates and less favorable terms than in urban areas.

The farm crisis has exacerbated the lack of credit in rural areas. Agricultural banks, those with at least 17.5% of their loans to agriculture, constitute about 25% of all banks but accounted for more than half ot he bank failures in 1984.

In rural America, subsidized credit is absolutely essential to improving housing for the poor. The high incidence of substandard housing as measured by lack of complete plumbing, lack of adequate drinkingwater, inadequate heat and inadequate waste disposal facilities makes a production and repair program, such as that administered by FmHA, essential.

Selected Housing Characteristics for Rural Areas

	Units	% Rural
Units lacking complete plumbing	1,302,767	55.8
Units lacking adequate drinking water	2,604,225	92.1
Units lacking adequate heat	4,446,102	54.1
Units lacking adequate waste disposal	16,960,631	75.4

HUD housing assistance is provided to low income households renting standard housing units. There is a disportionate amount of substandard housing in rural America -- some 38% of the nation's bad housing is in rural areas -- and rural rental housing is twice as likely to be substandard as other housing in rural areas or big cities. HUD assistance is not, by itself, an adequate response to the rural housing problem. New housing and home repair provided by FmHA are critical to providing low income people with decent housing.

In addition to the limited utility of the HUD program for rural areas, is the lack of funding requested by the Administration. HUD assisted housing has been cut by 2/3's since 1980. The FY '86 budget proposes to rescind over $4.5 billion and further reduces FY '87 levels to $2 billion. Total new units of assisted housing available from the federal government will drop from 170,000 in FY '86 (without rescissions) to 50,000 in FY '87.

By law, participation in FmHA programs is limited to low and very low income households. The average income of participants in federal rural housing programs is at or below the poverty ($10,600). Since its inception, over 2 million disadvantaged rural households have received assistance through the FmHA program.

Besides terminating loan programs for ownership and rental housing, the President's budget also kills small, but effective programs such as self help housing technical assistance grants, home repair loans and grants for low income elderly households, farm labor housing grants and rural housing preservation grants. All are designed to help those with the least resources and the most desparate need for housing.

During the period between 1970 and 1980 the incidence of substandard housing in rural America dropped by 42%. It is no coincidence that federal rural housing loans and related assistance programs were on the rise. Termination of these programs means an end to theprogress made in solving the rural housing problem.

While the Administration proposes that community facilities of FmHA be taken over by HUD Small Cities Community Development block grant programs there will be little money to do so. A reduction and deferral of $500 million is proposed. HUD Small Cities funds are used for any non-metropolitan area while FmHA resources are concentrated on communities of 5,000 population and below. There is little evidence that HUD programs are by themselves effective in meeting rural community facility needs.

Over 5 million rural people drink bad water and 95% of the households without adequate plumbing live in rural America. The Administration proposed to transfer the responsibility for community facilities from FmHA to HUD Small Cities Community Development Block Grant will do little to improve this situation.

While the budget proposes to increase the non-metro share of CDBG funds to 35%, an overall reduction in the total means less funding available for small cities. Small Cities CDBG funds are needed by cities up to 50,000 population for a range of activities, including, but not limited to community facilities. FmHA funds are targetted to small communities usually with populations of less than 5,000 for only one purpose. Under the Administration's proposal, smaller rural communities needing clean drinking water will be forced to compete with larger communities.

Recommendations

In order to continue to meet the pressing need for decent housing and adequate community facilities in rural areas, NRHC generally recommends that programs be continued at FY '86. More specifically we urge the Committee to adopt the following:

Rural Housing Insurance Fund (RHIF) -- NRHC recommends a level of $2.145 billion for the RHIF including:

Section 502	$1,410 million
515	$ 700 million
504(1)	$ 15 million
514	$ 20 million

These programs have been mainly responsible for the reduction in the incidence of substandard housing in rural areas. The average annual income of Section 502 borrowers is $11,400; while the annual income below is $8,000. Over 2 million economically disadvantaged families have gained decent housing through the RHIF programs. Yet, the fault rate on the portfolio is less than 1%.

In FY '86, as required by the budget resolution, the lending levels on the RHIF were reduced by some 40%. We do not believe that, in light of the performance of these programs, this reduction was justified and urge that there be no further cuts in these programs.

Farm Labor Housing -- Farmworkers are among the nation's poorest and worst housed people. Government studies estimate that there is the need for close to 1 million units of housing for farmworkers. The federal response to this problem is a modest, but important, program of loans and grants authorized under Section 514 and

516 of the Housing Act. Last year about $10 million in grants funds were made available. At least that much will be necessary in FY '87. FmHA has on hand over $53 million in applications in various stages of development. This far exceeds the funds available in FY '86 -- $10 million in grants and $12 million in loans. We urge the Committee to provide the funds needed to meet this demand.

Self Help Technical Assistance Grants -- These funds are provided to non-profit organizations which help low income families build their own homes. The cost per unit of these grants -- about $5,000 -- is more than made up through savings to the federal government in terms of mortgage funds and interest credit costs in Section 502 loans sued in the self help program. In addition, the average income of self help families is about 12% less than the average income of otehr 502 borrowers -- well under poverty line. The 1983 Housing Act requires that 40% of Section 502 loans go to very low income families. A good way to meet this goal is to continue funding for self help technical assistance grants at no less than the FY '86 level of $8 million.

Rural Rental Assistance

While great progress has been made in reducing the incidence of substandard housing in rural areas, close to 850,000 low income households still live in bad housing. For these families, the only option to achieve decent housing is through the deep subsidy provided through self help technical assistance grants or rural rental assistance combined with Section 515 rural rental housing loans.

Rural rental assistance payments make up the difference between 25-30% of a very low income household's income and the market rate rent on a Section 515 unit. In FY '86, only about 3,500 new Section 515 units received rental assistance payments.

In FY '87, about 15,000 existing rental assistance contracts will expire. We urge the Committee to provide the funds necessary to renew these contracts. In addition, we recommend that the Committee provide an additional $150 million to provide deep subsidy to about 13,000 units of newly constructed Section 515; about 50% of the number to be financed by a funding level of $700 million.

Rural Housing Preservation Grants

We recommend an additional $20 million in funding for Rural Housing Preservation Grants. FmHA currently has $20 million on hand and is expected to issue new regulations soon. This program targets home repair aid to low income families. It relieves FmHA of the processing burden associated with Section 504 loans by turning over responsibility of administration to public and private non-profit organization. The additional authorization of $20 million will bring the total of funds available to about $40 million, less than half of the original annual authorized level of $100 million.

Water Waste Disposal Loans and Grants

We urge the Committee to continue funding for rural water sewer loans and grants. We estimate that FmHA has on hand over $700 million in funding applications. With close to 10 million rural families drinking bad water, it is essential that the Committee continue, and if possible, expand this program.

Attachment

RAR/ysr

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April 24, 1986

The Honorable Jamie L. Whitten, Chairman
House Subcommittee on Agriculture, Rural
 Development, and Related Agencies
Committee on Appropriations
2362 Rayburn House Office Bldg.
Washington, D.C. 20515

Dear Chairman Whitten:

The American Society for Microbiology (ASM) wishes to submit for your consideration the following comments on the Fiscal Year (FY) 1987 basic research budget for the U.S. Department of Agriculture (USDA).

The ASM is the largest single biological life science organization in the world with an active membership of over 34,000. Many of these individuals are engaged in agricultural research and are recipients of awards administered by the USDA. Our comments are directed primarily to the Competitive Research Grants program and the initiative in biotechnology within the Agricultural Research Service (ARS), increased support for training and the Administration's proposed termination of support for the animal welfare inspection program in the Animal and Plant Inspection Service (APHIS) of the USDA.

The ASM is encouraged by the USDA's initiative in biotechnology within the Competitive Research Grants program and the ARS. We believe that the direction the Agency is taking will benefit agriculture in the United States and will aid in maintaining the preeminent position the U.S. enjoys on a global basis. In our opinion, research related to agriculture is as essential to the economic and social well-being of the United States as other areas of research which have consistently received strong federal support, namely defense and health.

The ASM strongly urges that mandatory cuts in the USDA's research budget be allowed to be made at research management discretion as opposed to across-the-board cuts. Across-the-board research budget reductions have several negative impacts on research programs: 1) across-the-board cuts deny funds to both good and poor programs, thus denying resource rewards to the best research; 2) they preclude management decisions in establishing priorities for research, thus ability of programs to be responsive to the stated needs of the users of agricultural research findings; 3) across-the-board cuts are particularly detrimental to new research initiatives in biotechnology and bioregulation. These new programs will suffer from elimination of salary lines held by young scientists, newly trained in the cutting edge of technologies who are in the most productive phase of their careers; and 4) managers who implement across-the-board reductions protect salaries first; cuts are taken preferentially in support staff, equipment and operating supplies. This is devastating to molecular level research because modern technologies require high support to salary ratios.

The ASM believes that indiscriminate budget cutting could result in the unfortunate and irresponsible sacrifice of the measurable gains in biotechnology that have been made by the USDA. Although the ASM fully appreciates the need for fiscal restraint in the FY 1987 budget, we are deeply concerned that the level of funding requested by the Administration for Competitive Research Grants will not fulfill the objectives of the program in a timely and efficient manner.

The USDA has consistently lagged behind other agencies in funding research. A large number of worthwhile projects are not being funded. The proposals that are funded are at a comparatively low level. Research in biotechnology and the biological sciences is costly. It demands well-trained scientists, support personnel to utilize the time of these scientists efficiently, expendable items and expensive state-of-the-art instrumentation. Basic research with eventual application to agriculture costs the same on a per project basis as research performed on biological systems when applied to health (National Institutes of Health) or fundamental biological science (National Science Foundation). During FY 1985, the last year for which data are available, a USDA-funded scientist, was expected to perform research in the area of agriculture with an award that averaged $51,300 per year (Table 1 and Table 2). A history of the funding practices within the USDA for the past seven years is described in Table 2. The USDA has consistently lagged behind the other federal agencies in its annual award rate (Table 1 and Table 3). In comparison, grants awarded in 1985 by the National Science Foundation (NSF) averaged $67,600 per year and grants awarded by the National Institutes of Health (NIH) averaged $147,000 per year (Table 1).

Although the ASM is encouraged by the moderate increase in the average annual grant awarded by the USDA in FY 1985, ($51,300 as compared to $35,200 in FY 1984) it is deeply concerned about the lack of funds in the program. The level precluded the funding of a large number of worthwhile research proposals. Only 8.9% of the requested amounts in the Competitive Research Grants program were funded in FY 1985 as compared to 10.6 % in FY 1984 (Table 2). Also, the percentage of proposals resulting in grants decreased from 25.7 % in FY 1984 to 19.4 % in FY 1985. If the USDA levels are compared to the NSF (37.7%) and NIH (37.3%) levels (Table 1), it is obvious that in 1985 scientists working in agriculture who applied for USDA funds were 50% as likely to be funded as their counterparts who applied for funds from NSF or NIH. It has been estimated that the grant applications to the USDA Competitive Grants program in FY 1986 have decreased by about 20%. This is a solid indicator that the aim of the Competitive Grants program, which is to bring basic researchers into agriculture, has been compromised. Apparently, researchers do not find it efficient to apply for grants that have such a low possibility of funding, a relatively low award level as compared to NSF and NIH, and a shorter duration of the award - two years vs. three to five years. Additionally, the USDA budget in the Competitive Grants area is extremely small when compared with other federal agencies (Table 1). The advances in science expected for agriculture involve biological systems which are much wider in scope than those of the other agencies. A myriad of plants and animals must be included in agricultural research. Numerous studies on the "state-of-the-art" of agriculture have identified that severe knowledge gaps exist in the understanding of agriculturally important plant and animal cells at the molecular level. These deficiencies impede progress. Although the technology exists to move genes from cell to cell, the majority of the genes which should be moved to increase productivity or nutritional quality have not been identified.

The Competitive Grants budget is only $42.4 million in FY 1987. The FY 1987 Competitive Grants budget is $4.4 million less than the FY 1985 budget. In FY 1985, 504 proposals were funded through the Competitive Grants program. It has been estimated that in FY 1985 there were more than 352 proposals (not including the alcohol or forest research programs) that were judged by peer evaluation to have the scientific merit but which were not funded because of insufficient monies to make the awards. If these were funded, the percentage of proposals resulting in grants would be 38%, a level that is commensurate with NSF and NIH. This level of funding would require $161.4 million in the Competitive Grants program (2,592 proposals x 0.38 x $67,600 per year x 3 years). Funding of the Competitive Grants program at $161.4 million would bring the level of funding for agriculture on a par with NSF. This level of funding for a basic understanding of agriculture would cost less than one dollar per capita per year to ensure that the U.S. retains its preeminent position in agriculture and continues to supply its citizens with the most nutritional food at the lowest possible cost.

The Administration has recommended budgetary reductions for Higher Education grant programs ($5.78 million) with no funding requested for Competitive Graduate Training grants. This comes at a time when the number of research trainees is declining and the situation will be worsend by cuts in the research training budget of the USDA. If the annual award rate for Competitive Research Grants does not increase to an appropriate level to permit training assistance, it is not feasible to terminate funding for training grants in the FY 1987 budget. Full funding of the Competitive Grants Program at the level of $161.4 million might eliminate the need for training grants, but funding at lower levels does not. It usually requires that an individual study and conduct research three to five years beyond a BS level to earn a Ph.D. When awards are allotted in the Competitive Grants program, they average two years. These awards terminate in the middle of a doctoral candidate training in his or her research. If a new award is not made in the same area of research, the candidate is devoid of support and often results in the termination of the research project. Even if the candidate obtains some support (teaching assistantship or unrelated job) to compensate for the loss of his or her fellowship ($7,000 to $12,000 per year), it results in an inordinate increase in the time it takes a candidate to earn a Ph.D. This significantly decreases the number of productive years that are devoted to agricultural research.

The Administration has also recommended that the research activity of the Special Grants program ($31.5 million), animal health and disease research ($5.73 million) and Competitive Grants in pest research ($2.9 million) be eliminated. It should be recognized that these proposed cuts ($40.13 million) will also significantly impact the training of individuals in agriculture since these funds support graduate students and postdoctoral fellows. If these programs are eliminated, the monies inherent in the programs for training should be shifted to the Competitive Grants program to ensure that there is an adequate supply of scientists to satisfy the needs of agriculture in the future. The ASM also recommends that if Congress determines it is necessary to restore funding for these programs because it perceives specific problems must be solved in agriculture, that, whenever possible, it direct these funds to research involving the new methodology of biotechnology. This approach would yield innovative solutions to new and old problems that have not been possible in the past. This type of direction would solve specific problems while building a biotechnology base in agriculture which would subsequently be applied to all agricultural needs.

The ASM is seriously concerned that funding for the animal welfare inspection program of APHIS ($4.6 million) is again slated for termination by the Administration. We believe the APHIS animal welfare program is essential for equitable and uniform inspection of animal research facilities and licensed dealerships. Enforcement of the Animal Welfare Act on a national basis is in the best interest of the federal government and the biomedical research needs of its citizens. The ASM strongly supports the assessment of the National Association for Biomedical Research (NABR) that $6.65 million for FY 1987 is the minimum amount required to implement the Animal Welfare Act as recently amended.

The ASM also strongly supports the $14 million initiative within the ARS for Commodity Conversion and Delivery to develop new food and nonfood uses for surplus agricultural commodities. This initiative is especially timely since progress in biotechnology should yield increased productivity of agricultural commodities. This type of effort is essential to balance the dilemma of keeping U.S agriculture preeminent in the use of new technologies while still improving the demand for these products.

We appreciate the opportunity to express our views and stand ready to assist in any way possible during your deliberations on the FY 1987 budget for the USDA research and training budget.

Sincerely,

Moselio Schaechter

Moselio Schaechter, Ph.D.
President, American Society
for Microbiology

Harlyn O. Halvorson

Harlyn O. Halvorson, Ph.D.
Chairman, Public and Scientific
Affairs Board, ASM

Rudy Wodzinski

Rudy J. Wodzinski, Ph.D.
Chairman, Committee on
Agricultural, Food and
Industrial Microbiology, PSAB

TABLE 1
Comparison of Funding of Biological Research in the
U.S. Department of Agriculture, National Science Foundation
and National Institutes of Health
(FY 1985)

	USDA[a]	NSF[b]	NIH[c]
Number of proposals	2,592	4,445	16,762
Number of grants funded	504	1,675	6,246
Percent (%) of proposals resulting in grants	19.4%	37.7%	37.3%
Amount requested (dollars in millions)	$578.1	$1,094.5	$ 2,233.4
Amount awarded (dollars in millions)	$ 51.7	$ 113.3	$ 918.1
Percent (%) of requested amount awarded	8.9%	10.35%	41.1%
Average amount of award (dollars in thousands/year)	$ 51.3	$ 67.6	$ 147.0

[a] USDA - data for competitive grants but does not include training grants

[b] NSF - data for the cellular and molecular biology biosciences divisions, directorate for biological, behavioral and social sciences

[c] NIH - data for total NIH

Source: USDA, NSF and NIH

TABLE 2
Funding practices in the Department of Agriculture
Competitive Research Grants Program
(FY 1978-1985)

	1978	1979	1980	1981	1982	1983	1984	1985
Number of proposals	1,109	861	598	793	780	909	853	2,592
Number of grants	197	193	206	207	212	219	219	504
Percent (%) of proposals resulting in grants	17%	22%	34%	26%	27%	24%	25.7%	19.4%
Amount requested (dollars in millions)	$ 250	$134	$ 99.7	$139.3	$130.7	$160.3	$154	$ 578.1
Amount awarded (dollars in millions)	$ 14.4	$ 14.55	$ 15.04	$ 15.5	$ 15.83	$ 16.46	$ 16.4	$ 51.7
Percent of requested amount awarded	5.7%	10.8%	15.1%	11.1%	12.1%	10.3%	10.6%	8.9%
Average annual award per year (dollars in thousands)	-	-	-	-	-	-	$ 34.3* $35.2	$ 51.3

*Grant awards averaged $74,845 but were generally for two years

Source: USDA

TABLE 3

Funding practices in the Physiology, Cellular and Molecular Biology Biosciences Division, Biological, Behavioral and Social Sciences Directorate of the National Science Foundation (FY 1980-1984)

	1980	1981	1982	1983	1984	1985
Numbers of proposals	3,540	3,316	3,515	4,302	3,895	4,445
Number of grants	1,487	1,484	1,474	1,491	1,610	1,675
Percent of proposals resulting in grants	42%	44.8%	41.9%	34.7%	41.3%	37.7%
Amount requested (dollars in millions)	-	$ 677.3	$ 779.9	$ 855.4	$ 971.4	1,094.5
Amount awarded (dollars in millions)	$ 72.1	$ 78.2	$ 80.1	$ 87.3	$ 101.4	113.3
Percent of requested amount awarded	-	11.5%	10.3%	10.2%	10.4%	10.4%
Average award per year (dollars in thousands)	$ 48.5	$ 52.7	$ 54.4	$ 58.6	$ 63.0*	$ 67.6

*Average size of new award is estimated at $74,000 and overhead is estimated at 30% of the award

Source: NSF

STATEMENT OF

JAMES B. GRANT
EXECUTIVE SECRETARY

OF THE

NATIONAL ASSOCIATION OF STATE DEPARTMENTS OF AGRICULTURE

BEFORE THE

SUBCOMMITTEE ON AGRICULTURE,
RURAL DEVELOPMENT AND RELATED AGENCIES

COMMITTEE ON APPROPRIATIONS

U.S. HOUSE OF REPRESENTATIVES

April 15-16, 1986

Mr. Chairman, and members of the subcommittee, I am J.B. Grant, Executive Secretary of the National Association of State Departments of Agriculture. I am pleased to make this statement on behalf of our association.

NASDA represents the departments of food and agriculture in the fifty states and the U.S. Territories of Guam, American Samoa, Puerto Rico and the Virgin Islands. These state and territorial departments of agriculture work closely together.

First I would like to reiterate a long standing policy of NASDA. We believe the federal deficit should be reduced and that the federal government, as we do in the states, should operate from a balanced budget. We have repeatedly said we are willing to do our part in reducing the national deficit. We still maintain that position, but we are not in favor of agriculture taking more than its fair and equitable share of those cuts. The budget you have before you, complete with the 4.3 percent sequestering in the 1986 budget under Gramm-Rudman-Hollings, if enacted, would mean an almost 23 percent reduction in the USDA budget from 1986.

We believe there is no fairness in this and that USDA should not be singled out for the largest cuts of any major federal agency. And to top it all, most of these programs slated for major cuts, obliteration or user fees are federally-mandated consumer protection or service programs, many carried out cooperatively with states and industry. The justification by the administration, all through the budget, is that the states and or industry will pick up these programs. We submit to you that the states and a depressed agriculture are in no financial condition to pick up these programs, nor should they have to assume total responsibility for these federally-mandated programs.

Cooperative programs, jointly funded and jointly administered are a cost-effective way of carrying out necessary government programs. They have proven successful and efficient over the years. We believe they must continue on a cooperative basis, and ask your support in accomplishing this goal.

The Administration budget calls for total user fees to fund many mandated programs. NASDA's policy is simple and straight forward on this issue. We are opposed to user fees for mandated federal programs that serve a broad constituency, e.g. consumers and general public. These are, to a great extent, programs that serve to protect the health and welfare of the American public and should be financed by appropriated funds.

Daily we hear how important it is to have a strong national defense. We agree this is true. However, a well managed, cost-effective program must be the goal. Seldom do we hear how important it is to have a strong program of food security. A well managed, cost-effective defense system requires a strong, secure food and farm system. Together we must strive to keep both our defense and food systems strong and viable.

Today the American farmer is battling for survival. Times are tough. Everyday we hear about farmers losing farms that have been in their family for generations, farmers taking their own lives, and financial chaos in rural America. Now is not the time to drastically cut back on essential agricultural programs.

NASDA supported the administration in going to a market-oriented approach to agriculture. We also backed the administration in reducing price supports to make our products more competitive in the export market. Now the administration seeks to reduce funds for our export programs at a time when our exports barely exceed our imports. The cooperator program administered by FAS has been cut by 50 percent in 1987. In our judgement this is absolutely not justified. Particularly in view of the administrations stated views on increasing our agricultural exports. We respectfully urge you to restore these funds and send a message to USDA and OMB soon, so that essential cooperator programs will not have to be phased out to comply with this proposed 50 percent reduction before the federal budget becomes final later this year.

Food quality and safety programs are being reduced at a time when they are most needed. Animal and plant health programs are necessary and essential to a healthy and abundant agriculture. It would be a waste of previously spent taxpayers' money to drastically slash or eliminate these programs now. Instead, we ask you to work with us, the USDA and industry to complete programs and work toward eradication of such maladies as brucellosis and witchweed.

The American consumer benefits by production agriculture, and drastic cuts in funds or program elimination will ultimately affect consumers by a scarcity of product, unstable supply or reduction in quality, and very likely an increase in price.

As we move into highly competitive world markets now and for a long-term forseeable future, it is imperative that we stay on the forefront of technology and science as applied to agriculture. We urge you to continue your strong support for our research and extension programs, which have done so very, very much to move U.S. agriculture to its place of prominence. We have the greatest agriculture in the world and we must maintain that position.

Our natural resources; soil and water, necessary for a sound and productive agriculture must be preserved. Your committee has long been a champion for a strong soil and water conservation program. We urge you to continue that support so that the future needs of U.S. and world agriculture can be met.

Programs such as the Federal/State Marketing Improvement Program, the Wholesale Market Development program and the Federal Seed Act, destined for obliteration in the 1987 budget should be continued and we urge you to adequately fund these programs. We also ask that such programs as the imported fire ant, pseudorabies, and noxious weeds receive adequate funding.

Abraham Lincoln called the Department of Agriculture the "Peoples Department." Surely that has been the case since it was established. We remember, Mr. Chairman, several years ago when legislation was introduced in the Congress of the United States to abolish the Department of Agriculture and move its necessary functions to other agencies of government. The idea was rejected, as it should have been. Now, in the act of balancing a budget, we are faced with the very same consequences. To eliminate those programs that have so well served the American farmer and rancher, and the consuming public of this great nation, would desecrate President Lincoln's depiction of USDA as the "Peoples Department."

Surely, we must balance the Federal budget and we can.

But, we respectfully urge you to look at the overall federal budget as you debate the USDA and FDA budgets and adjust the FY 87 budget you have before you to reflect equitable cuts. You hold the future of agriculture programs, necessary programs, in your hands. It is a tremendous responsibility. We stand ready to assist you in any way we can. Thank you for the opportunity to comment.

Colorado River Basin

Salinity Control Forum

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Statement

of the
COLORADO RIVER BASIN SALINITY CONTROL FORUM

before the
HOUSE COMMITTEE ON APPROPRIATIONS
SUBCOMMITTEE ON
AGRICULTURE, RURAL DEVELOPMENT AND RELATED AGENCIES

presented by
JACK A. BARNETT, EXECUTIVE DIRECTOR
April 22 ,1986

Requesting additional funds over and above the 1987 budget request by the President for the Colorado River Basin Salinity Control Program.

Including:

1) $4,000.000 for on farm salinity control
2) $2,000,000 for SCS and other technical assistance.

Congress passed significant salinity control legislation for the Colorado River Basin two years ago. The legislation authorized a new Department of Agriculture program and requires the state and local entities to cost share in amounts at least equal to the federal contribution. This newly authorized program will facilitate the salinity control efforts by the Department of Agriculture in the Colorado River Basin and will replace efforts that were started under general authorities already vested in the Department of Agriculture where approximately $6 million a year has been designated by the Congress over the last few years to be spent for salinity control.

****

The water of the Colorado River system serve some 17 million people and irrigates about 1.6 million acres in parts of the seven Colorado River basin states. Salinity has long been recognized as one of the major problems in the river. Water users situated lower in the river system have suffered significant adverse impacts due to the river's salinity. It has been estimated that salinity damages amounted to more than $100 million a year. Without salinity control measures, and with increased demands for Colorado River water in the basin, the river's salinity is projected to increase, further impairing the the usefulness of this water supply. It is projected that without salinity control the economic damages suffered by water users will double by the turn of the century.

Concerns about the increasing salinity of the river led to creation of the Colorado River Basin Salinity Control Forum in 1973. The Forum, whose members are appointed by the governors of the respective states, developed a salinity control policy that calls for maintaining salinity concentrations at or below those levels found in the lower river in 1972 while the basin states continue to develop their compact apportioned waters. This salinity control objective is the Basin states adopted, EPA approved, water quality standard for the Colorado River Salinity problem which was adopted persuent to the Clean Water Act. The policy forms the basis for the cooperative federal-state basin wide salinity control plan. The Forum has a continuing responsibility to see that a salinity control plan is implemented to meet the policy objectives.

In 1974, after discussions between the federal government, the Republic of Mexico, and the seven Colorado River Basin states, Congress enacted the Forum sponsored Colorado River Basin Salinity Control Act (P.L. 93-320). Title I of the Act established a program to reduce the concentration of salts in the Colorado river below Imperial Dam, the last diversion point in the United States, so that the United States could honor it's 1973 agreement on Colorado River Salinity with Mexico. In Title II, the Act established a program which allowed the states and the federal government to work together to prevent salinity increases in the Colorado River above Imperial Dam, benefiting users in the United States as well as Mexico. The 1974 Act also created a Colorado River Basin Salinity Control Advisory Council, composed of governor appointed representatives of the Basin states, to advise the Secretaries of the Interior and Agriculture and the Administrator of the Environmental Protection Agency as to needed annual adjustments to the salinity control effort.

In 1984, Congress enacted much needed amendments to the 1974 Act that were advanced by the Forum. The amendments, Public Law 98-569, authorized additional activities for the Departments of the Interior and Agriculture that are needed in order to meet the objectives of the Act. In recognition of the proven cost effectiveness of Agriculture's on farm management activities in controlling river salinity in the Basin, a separate Colorado River Basin on farm management salinity control program was authorized for the Department of Agriculture.

The Advisory Council, in working with Agriculture, made specific recommendations in its 1985 Annual Report relative to Fiscal Year 1987 funding of the salinity control efforts consistent with the newly enacted amendments. The recommended funding level is that required to maintain the adopted salinity standard. The President's proposed Fiscal year 1987 budget activities calls for no funding for Agriculture's on farm program. This is despite the fact that the program has been funded in the past by congressionaly designated ACP funds and the President had requested in two past fiscal years more than $12,000.000 per year in anticipation of the new congressional authorization.

The proposed level of funding in the President's budget seriously jeopardizes the continued progress and effectiveness of the Colorado River salinity control efforts. It seriously restricts the implementation of the cost effective on farm salinity control measures of the Department of Agriculture that were initiated in 1979.

At a time when the nation faces significant financial difficulties, it is recognized that funds for every federal program must be reviewed. However, the Advisory council's funding recommendations are considered to be the minimum level of funding necessary to assure that salinity control efforts move forward in a timely manner. Work must continue on the Department of Agriculture's on farm program. Delays will not only result in greater salinity pollution of the Colorado River but ultimately will require that a greater amount of funds be spent on this effort.

To maintain a realistic efficient schedule the President's budget needs to be increased by $6.0 million for Agriculture's on farm program and associated technical assistance. The federal government need not pay the entire cost of these salinity control activities. The requested federal cost sharing money represents less than half of the total on farm program cost.

Under the newly authorized, cooperative on farm salinity control program, a combined state and local contribution of 51 percent will be provided, as a minimum, non federal sharing of costs. This is a significant increase in the non federal contribution as compared to the continued Congressional designation of the use of ACP funds as has been the case in every year since 1979.

In behalf of the Forum let me express our appreciation for the opportunity to convey to Congress our thoughts and state that we strongly urge the establishing an agricultural line item for Colorado River Basin salinity control as action now with respect to this appropriation will result in the most cost effective program both in the short and long term.

TESTIMONY OF DR. R. G. BROWN
HEAD OF FOOD SCIENCE & NUTRITION
UNIVERSITY OF MASSACHUSETTS, AMHERST
BEFORE THE U.S. HOUSE OF REPRESENTATIVES
SUBCOMMITTESS ON AGRICULTURAL APPROPRIATIONS
FATS & OILS RESEARCH IN THE UNITED STATES & THE WORLD ECONOMY

FOOD FATS AND OILS: A NEED FOR INCREASED RESEARCH AND DEVELOPMENT

The United States enjoys a major position in world production and trade in food fats and oils but now that position is eroding and we are importing ever increasing amounts of food fats and oils. In 1984 the US produced and sold some $14,600 millions worth of food fats and oils and oil seeds. Oilseeds are major crops in many agricultural States, especially in the hard-hit mid-west and south. The US is loosing ground in exports of key vegetable oils. For example: In 1979 we exported 1.2 million tons of soybean oils in 1979 and only 0.79 million tons of soybean oil in 1984. Similarly, our exports of cottonseed oil in recent years (195,000 tons) were only half of what they were in 1982 our exports of linseed oil have fallen to 7,000 tons last years compared with 96,000 tons in 1971. At the same time, our imports of palm oils have increased 350% (to 107,000 tons) since 1970 and we imported 600% more peanut oil last year than in 1976. Since 1971 our imports of fats, oils and oilseeds have increased 25 fold. A major cause for this change is economic as well as the desired functional properties of these imported oils in food and industrial uses. The level of innovative research and development in food fats and oils in recent years has declined for many reasons including the growing concentration of power in the food industry into a few hands.

It is in the national interest to reverse this trend toward increasing dependence on imported food fats and oils. This is best achieved by implementing a program in basic and applied research in food fats and oils through the land grant universities of this nation. Such a program, which is not connected to the needs for return on investment or corporate goals, should address the questions of increased utilisation and basic understanding of th functionality of fats and oils which will have broad application and which will stimulate new industrial and agricultural activity.

In addition to the needs for industry, food fats and oils have a human health dimension. Recent US government publications emphasise the important roles of unsaturated fats and oils in the human diet. Of special interest in this connection are a group of fats which come from fish oils and which are known as 'omega 3 and omega 6' oils. Preliminary trials show that the use of these oils in the human dietary has beneficial effects on cardiovascular health an therefore may aid is controlling heart disease which is still a major killer in our society. Unfortunately, these oils are vary difficult to extract in pure form which would be stable under the usual conditions of trade. Added research will be required to be able to isolate these fats in pure form and to measure their biological effectiveness. An integrated research and development program which brings the disciplines of food chemistry, food biochemistry, physiopathology and nutrition together to study these vital oils is necessary if we are to understand their role in human health and well-being. It in our interest as a nation to carry these integrated studies.

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The discussions that surrounded the questions of fats and oils in human health over the past two decades have had a marked, negative effect on the dairy and meat industries of this country. Concern over the role of dietary cholesterol in the aetiology of heart disease led to a decline in the consumpton of dairy products by Americans and serious economic damage to dairy farmers in New England and elsewhere. The decline in dairy product consumption caused a more sinister change in the diet of Americans. In their desire to avoid cholesterol intake by not consuming dairy products, people inadvertantly decreased their intake of calcium which is necessary for good bone health. In recent years, physicans have noted an increase in the incidence of osteoporosis, a crippling disorder linked to long term intakes of low levels of dietary calcium. This disorder is found frequently in middle-aged females. Likewise, recent evidence suggests that the high blood pressure, to which many Americans of African ancestry are subject, may be related to an insufficient intake of calcium. The key thing to resolve the issue is to find a way to enable Americans to consume milk for all of the vital nutrients it contains without fear of the effects of increased cholesterol intake. Recent research data suggests that the oxidised form of cholesterol is responsible for the cardiovascular problems associated with higher cholesterol intake. It is of great importance to both the nation's health and to the well being of the dairy industry to further investigate the factors which control or eliminate the oxidation of cholesterol in natural food products such as milk. This should be done using an integrated

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approach which combines the forces of food chemistry with those of food biochemistry, physiopathology and nutrition.

TESTIMONY OF DR MIRIAM WILLIFORD
BEFORE THE U.S. HOUSE OF REPRESENTATIVES
SUBCOMMITTEE ON AGRICULTURE APPROPRIATIONS

I want to thank the Chairman, the members of the Subcommittee, and Mr. Conte for the opportunity to submit testimony on several issues that I feel should be of concern to this Subcommittee, the nation, and the whole farm economy.

At the University of Massachusetts, as the Associate Provost for Public Service, I chair the Chancellor's Working Group on Economic Development. The mission of the Working Group is to find ways for the University to have a maximum impact upon the local, state, and national economy. Through public service, I have come to work closely with our College of Food & Natural Resources and the University's Extension Service. These experiences have brought several issues concerning agricultural research and the farm economy to my attention which I would like to share with the Appropriations Subcommittess on Agriculture.

The first issue concerns the problems surrounding the diversification of agricultural products. In the Midwest, farmers have depended heavily upon traditional crops such as corn, soybeans and livestock and export markets to generate income. Massachusetts has been hurt less by these problems that Midwestern farmers have experienced with these agricultural products and declining export and domestic markets, by diversifying into new and different products. For example, Massachusetts farmers are producing cranberries, blueberries, sweet corn, apples, Christmas trees, and a range of cheeses. Massachusetts farmers face serious problems, however, in that there is a lack of research funds to support the basic research needed for the development of these new crops -- cultivation, pest control and erosion problems are issues that all need to be tackled. This lack research funds in a state that has diversified its agricultural product base, and is trying to further diversify, presents an even greater problem nationally for other regions that have yet to try to diversify.

A good case study of the lack of funds for this type of research is when an agribusiness wanted to invest half a million dollars in growing a new agricultural product in Massachusetts, the University of Massachusetts faculty found that they lacked the funding to do the research necessary to adapt this European product to this country's soil and climate.

This lack of research funding for studying the cultivation problems of new agricultural products is also paralleled by a lack of research funding for studying pesticide and erosion problems for new and traditional products. Specifically, the USDA has supported research to improve the efficiency and productivity of plant production, but with changing economic and environmental conditions there are new pressing needs for research in this area. The problem that farmers are now facing in New England, and may face nationwide, is the banning of herbicide and pesticides, because they are polluting ground water supplies and raise potential health hazards. In Massachusetts, potentially all the herbicides and the pesticides used for common vegetable production and for orchard fruits may be banned. Such a banning, which has a high probability of happening in Massachusetts and the nation according to the scientists and extension specialists at the University of Massachusetts, would have a profound negative economic impact upon the Massachusetts, New England and national farm economies. In light of these changed environmental conditions and the potential economic damage that could happen, there is a pressing need for research to find new alternatives to traditional herbicides and pesticides.

Therefore I want to bring it to your attention that there is profound need in this country to increased federal funding for both product development and diversification and alternatives to traditional herbicide and pesticide measures.

npc
NATIONAL PEACH COUNCIL / P.O. Box 1085 / Martinsburg / West Virginia 25401 / 304•267-6024

STATEMENT OF NATIONAL PEACH COUNCIL

to the

SUBCOMMITTEE ON AGRICULTURE, RURAL DEVELOPMENT, AND RELATED AGENCIES
COMMITTEE ON APPROPRIATIONS
UNITED STATES HOUSE OF REPRESENTATIVES

April 14, 1986

REGARDING PRESIDENT'S PROPOSAL TO CUT FEDERAL FUNDS BY 59% TO
USDA'S COOPERATIVE EXTENSION SERVICE
FOR FISCAL YEAR 1987

BACKGROUND

National Peach Council is a nationwide non-profit association representing peach producers and persons in allied industry.

Peaches are grown commercially in 32 states. The first six states in peach production in a normal year are California, South Carolina, Georgia, New Jersey, Pennsylvania and North Carolina. Peaches are a very important component of the American diet because they are an excellent source of vitamins, low in calories (38), high in fiber and contain no sodium or fat. Fresh peaches are the number one summer fruit and are available May through September. In a normal crop year, 3 billion pounds of peaches are produced and valued at approximately $360 million. Peaches have experienced crop losses in four out of five years due to early spring freezes, and experienced tree losses due to winter injury caused by severe winter temperatures. This is not only a economic loss to a grower but also a loss of a nutritional product to the American consumer.

USDA/Agriculture Research Service has been diligently working on these problems that cause production losses. The fresh peach industry is very appreciative of appropriations provided to USDA/ARS that have enabled them to do research in the areas of development of winter-hardy varieties and rootstocks, frost and freeze protection, and the other factors that influence winter-hardiness of peaches. It has been found that winter injury is a major factor in the peach tree short life problem experienced in the southeast.

This on going, long term research gives the peach industry the ray of hope that someday, hopefully by the first part of the 21st century, the ability to survive the devastating spring frosts and winter kill will be realized. The network used to disseminate research-based information to the growers and provide the instruction on how to practically apply research results to their particular situation is the USDA Cooperative Extension Service.

THE PROBLEM

It has been proposed by President Reagen to cut federal funds for Cooperative Extension Service for Fiscal Year 1987, by 59% and to cut out all federally funded special research grants to the land grant colleges.

We feel these cuts are illogical, in that the Cooperative Extension Service (CES) is the only network with the capacity to gather and disseminate research-based information to every county in the United States. Without adequate federal support, the nationwide character of this service would surely change.

EFFECTS ON THE PEACH INDUSTRY

With a severe 59% cut across the board, it will cause viable programs and extension employees to be terminated. In some states, such as North Carolina which has only one tree fruit specialist, the loss of such a person would be devastating. There would be insufficient support staff for the education and transfer of research information to commercial peach growers. North Carolina's Agricultural Extension Service will experience a reduction of $6,946,326 or 54% of the current 1986 budget if Congress accepts the President's FY 1987 budget.

Federal funds reduction in South Carolina, the 2nd largest commercial shipper of fresh peaches, could cause the loss of 160-170 positions - 60 in regular extension programs, 110 in special funding programs including Integrated Pest Management (IPM). Research has shown that extension results produce impacts of $10 for each $1 spent on extension efforts. "Peach Short Life," a federally funded project through Clemson University is a very important research project that has been going on for six years. This research explores the reasons so many peach trees die out when only 5-7 years old. "Peach Tree Short Life" is a continuing threat to the health of the southeastern peach industry. Now is not the time to cut a project that has just begun to show results.

A $6.5 million proposed extension cut in "the peach state," Georgia, would mean a loss of 480 extension positions. It is estimated 100-150 of these positions directly involve the peach industry.

Special federally funded research projects such as "Peach Tree Short Life" and "Integrated Pest Management" are vital to the future of the peach industry. Any loss of ability of the Extension Serivce to transmit research generated technology at a time when agricultural producers are experiencing serious fiscal problems could cause serious negative implications for rural communities.

We have only given examples of effects of three of the 32 peach states, but the proposed budget cuts will seriously effect every peach state.

REQUEST

In view of the drastic consequences that could be fall the fresh peach industry, National Peach Council requests restoration of all federal extension funds for FY 1987 for agriculture, and continued funding for special state research projects for FY 1987.

SUMMARY

We are not asking for increased funding for USDA/ARS, increased funding for Cooperative Extension Service, or increased funding for state federally funded research projects. We commend the administration for these efforts to reduce federal spending and our concern is not with the Gramm-Rudman cuts. Our concern is that the proposed reduction of extension funds is coming at a time when the peach industry needs educational assistance and technology transfer more than ever. Most of the eastern peach growing states suffered severe losses due to weather and economic difficulties in 4 of the last 5 years. Some growers are having severe financial problems and some forced farm sales are occuring. Technology transfer is a high priority of OMB and the administration. Yet, ironically, the budget proposes to cut the most effective technology transfer system we have ever known. Therefore, we ask that these severe reductions in funds for the USDA/Cooperative Extension Service for FY 1987 be seriously reconsidered.

TESTIMONY
of
Faith T. Campbell
representing

the Natural Resources Defense Council
Defenders of Wildlife
Center for Environmental Education

before the

Subcommittee on Agriculture Appropriations
U.S. House of Representatives

The Natural Resources Defense Council (NRDC), Defenders of Wildlife (Defenders), and Center for Environmental Education (Center) appreciate this opportunity to present our views on certain appropriations for the Animal and Plant Health Inspection Service (APHIS) for Fiscal Year 1987. Additional testimony will be submitted concerning other issues under APHIS' jurisdiction. Together, these organizations represent over 100,000 people. Our members support strongly programs intended to conserve rare species of flora and fauna, including the Endangered Species Act (ESA) and Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). Consequently, we wish to bring to the attention of the Subcommittee on Agriculture Appropriations APHIS' continuing failure to carry out its responsibilities under these statutes.

The Endangered Species Act was enacted in 1973. It provides for the protection of listed species of animals and plants determined to be in danger of extinction. As of March 1986, 122 species of plants have been listed as endangered or threatened. These plants are protected by, inter alia, a requirement that any export or import be approved by a permit (issued by the U.S. Fish and Wildlife Service).

Also in 1973, the United States was host for the negotiation of the Convention on International Trade in Endangered Species of Wild Fauna and Flora. CITES, now ratified by 91 countries, requires permits for international trade in a large number of plant species threatened or potentially threatened by overexploitation. Included are all orchids, cacti, and cycads, and certain other succulents, carnivorous plants, and trees.

Under Section 3(15) of the Endangered Species Act, the Secretary of Agriculture has responsibility for enforcing controls over imports and exports of plant species listed pursuant to the Act or to CITES. This authority has been delegated to APHIS because of its long-time responsibility to inspect plant imports and exports for pests and diseases.

APHIS's Plant Protection and Quarantine (PPQ) program has an appropriation this year of $115,811,000; $1,850,000 of that is authorized under Section 15(a)(3) of the Endangered Species Act for enforcing trade controls under the ESA and CITES. In future years, this authorization is expected to increase slightly to $2,200,000.

The Administration's budget for FY 1987 requests a significant cut in PPQ funding to $83,519,000. This cut, however, is taken almost entirely from domestic pest control programs and should not affect port inspections of plant imports and exports either for pests and disease or for ensuring compliance with the Endangered Species Act or CITES.

Despite the clear legal mandate and presence of earmarked funds, APHIS has lagged in meeting its responsibilities. Since CITES came into force a decade ago, enforcement efforts by APHIS have resulted in the prosecution of only one alleged violator -- in 1978. During its consideration of the FY 1985 appropriations bill, the Senate Subcommittee on Agriculture Appropriations addressed several questions to APHIS. The agency's answers were vague. For example, it stated that the Department of Agriculture's Office of Investigation had investigated "several" alleged violations, but gave no information on why these cases were not prosecuted. APHIS also replied that it was considering "use of all options available" to deter violations, but committed itself to none. In its report, the full Appropriations Committee expressed concern at APHIS' delay, particularly its reluctance to impose penalties on even "known repeat offenders," and instructed APHIS to submit a report on its enforcement effort in early 1985. This "report," finally submitted in August 1985, consisted of photocopies of APHIS implementing regulation, issued in October 1984 (7 CFR Parts 355 and 356; see 49 FR 42912-42918).

In its replies to the Senate Subcommittee's questions, APHIS had hinted that it would take certain actions in the near future to improve the enforcement effort. NRDC, Defenders, and the Center contend that APHIS has not carried out these actions and consequently that the enforcement effort remains as unsatisfactory now as it was in 1984. The only detectable progress has been by the U.S. Fish and Wildlife Service (FWS) under a contractual agreement with APHIS that is now reported to be collapsing. Thus, the only CITES cases in recent years have been brought by the U.S. Fish and Wildlife Service (FWS), not APHIS.

Although APHIS has demonstrably made little effort to enforce the ESA and CITES, there is ample evidence of numerous violation of CITES controls regarding both imports and exports. In addition to the FWS cases enumerated here, we have learned of the following examples:

- During 1978-1980, the source of information on the 1978 cycad case supplied documented tips on at least three other illegal imports; no prosecutions resulted.
- In January 1984, NRDC told FWS and APHIS that in 1983 a Texas nursery had exported hundreds of cacti, many of them belonging to highly endangered species in Appendix I of CITES, to Saudi Arabia; no prosecution has resulted.
- In December 1983-January 1984, NRDC reviewed 1982 plant export records based on APHIS pest and health inspections. This search uncovered several probable violations of CITES, including exports of over 10,000 cacti, 10,000 lady slipper orchids, and almost 3,000 pitcher plants. Other than the Anthony case mentioned above, which may have resulted from this review, no other case has been prosecuted.

As we noted earlier, promulgation of the regulations has not resulted in an increased enforcement effort to date.

- In 1984, APHIS allowed the illegal importation of 3,900 Appendix I cacti because they were listed on the Mexican permits under 2 synonyms -- although these synonyms had been clearly mentioned on the CITES listing proposals, which were prepared by the U.S. FWS. This serious error was discovered not by APHIS or FWS, but by NRDC. The delay in correcting the error probably allowed a similar number to be imported in 1985.

- In late 1985, Arizona officials uncovered evidence of continuing illegal importations of about 300,000 cacti from Mexico. FWS is now investigating, but APHIS has denied responsibility because the initial evidence arose from interstate shipments rather than imports.

Both before and after issuance of the regulation, APHIS has refused to "look behind" CITES permits to ensure that the plants in the shipments really fit the explicit conditions on the permit.

- In March 1983, TRAFFIC (U.S.A.) informed FWS and APHIS that the 30,000+ cycads entering the country each year from the Dominican Republic were actually wild-dug, despite the use of CITES documents suitable for propagated plants. APHIS refused to prohibit imports until FWS instructed them to do so.

- In January 1986, NRDC wrote to APHIS to alert the agency to apparent illegal imports of wild-dug succulents from West Germany and Madagascar. These plants have been issued improper certificates of propagation by the exporting countries. NRDC followed up with a telephone call. The APHIS official primarily responsible for enforcing CITES has taken no action other than to forward copies of the letter to APHIS port inspectors; he has not instructed them to take any action.

APHIS continues to be handicapped in any enforcement effort by the lack of criminal investigators on its staff. For about a year, APHIS had a "contract" with FWS under which it reimbursed FWS for investigating plant cases at APHIS' request. We understand that this agreement is now on the verge of collapse due to disputes between the two agencies. Meanwhile, despite assurances given to the Senate Subcommittee in 1984, APHIS still has made no effort to hire or train its own investigators.

APHIS' failure to develop an effective enforcement program after a decade raises serious questions about both the agency's compliance with its statutory obligations and its use of appropriated funds. NRDC, Defenders, and the Center suggest that the Subcommittee on Agriculture Appropriations ask APHIS the following questions:

- o Exactly how many allegations of violations of CITES has APHIS received since CITES came into effect in 1975? Exactly how many of these allegations has APHIS or the USDA Office of Investigation investigated? Exactly how many has APHIS asked the U.S. Fish and Wildlife Service to investigate on its behalf?
- o Exactly how many civil penalties, other than forfeiture of the plants themselves, has APHIS imposed on plant importers or exporters who have not complied with CITES?
- o What is the current status of the APHIS-FWS agreement governing investigations of alleged violations? How many APHIS staff are trained in investigating alleged violations and preparing criminal cases? If none, how does APHIS plant to carry out its legal obligations to enforce CITES? When does it propose to hire or train investigations?

We urge, further, that the Subcommittee earmark $500,000 of the funds authorized to enforce CITES (for FY 1987, $2 million is contained in both the House and Senate bills reauthorizing the Endangered Species Act) for the hiring and training of criminal investigators. Funding at this level would enable placement of such investigators in the centers of the U.S. international plant trade: southern Texas, southern California, San Francisco, southern Florida, New York, and Baltimore and St. Louis (export centers for ginseng).

In its reply to the Senate Subcommittee, APHIS stated that its new regulations would enhance control over exports by requiring that they exit through designated ports. Unfortunately, NRDC, Defenders, and the Center must question whether even this assertion has been fulfilled. APHIS now relies on two state agencies, those of California and Florida, to inspect and approve exports of allegedly propagated CITES protected plants from nurseries in those states. This practice appears to be in conflict with APHIS' regulations, specifically the footnote to 7 CFR Part §355.22(b). NRDC, Defenders, and the

Center are concerned that this practice will allow continued export of wild-dug plants incorrectly described as propagated. At least one nursery now being inspected by Florida phytosanitary agents, Costa Nursery Farms, is a major trader in wild-collected cycads. To clarify this situation, NRDC, Defenders and the Center request that the Subcommittee ask APHIS the following questions:

- APHIS' regulations, specifically the footnote to § 355.22(b), explicitly require that plants protected by CITES or the Endangered Species Act and intended for export "be presented at the port for export together with the documents" at the time of validation of CITES or Act export documents. Are plants which are claimed to be artifically propagated, and which are inspected by cooperating state phytosanitary officials in Florida or California, now presented to APHIS personnel at a designated port at the time of validation of the export documents? If not, how does APHIS explain this variance from its own regulations?
- How does APHIS supervise the activities of the state cooperating agencies to ensure that their personnel understand and carry out their responsibilities and that violators are apprehended?
- Does the application for APHIS' "General Permit" require information as to the source of the applicants' plants, specifically whether they are propagated in accordance with CITES definitions? The regulations (§355.11, at 49 FR 42913) do not appear to request such information. If not, on what basis does APHIS assert that these General Permits conform to the resolution, Conf. 5.26, adopted by the Parties at the Fifth Meeting of the Conference of the Parties to CITES?

The Subcommittee should require answers to these questions by the middle of May, so that they may be considered in its appropriations mark-up. Furthermore, the United States and other CITES parties will gather for an important committee meeting in June; U.S. officials should be able to answer criticisms of the U.S. enforcement effort at this meeting.

NRDC, Defenders, and the Center believe that APHIS can become effective in enforcing statutes intended to protect endangered plant species, but only if certain changes made in current practice. We look to the Subcommittee on Agriculture Appropriations to ensure that the minimal step of hiring crim investigators is taken early in FY 1987. We further hope tha the Subcommittee will help to overcome other deficiencies in program.

STATEMENT OF THE MARCH OF DIMES BIRTH DEFECTS FOUNDATION

BEFORE THE

HOUSE APPROPRIATIONS SUBCOMMITTEE ON AGRICULTURE, RURAL DEVELOPMENT, AND RELATED AGENCIES

APRIL 16, 1986

The March of Dimes Birth Defects Foundation hereby presents its position on the funding level for the Supplemental Food Program for Women, Infants and Children (WIC) and its potential impact on the health of American mothers and babies.

Good nutrition during pregnancy and entry into prenatal care, made available through WIC, contribute heavily to the birth of healthy children. This is vitally important to the March of Dimes as a national, non-profit voluntary health agency supported by private contributions whose purpose is to prevent birth defects. Comparatively small amounts of money invested in nutrition and basic health care for pregnant women prevent some birth defects and result in savings many times the original cost. The return on such an investment is at least a 300 percent savings on first-year hospital costs alone. Projected long-term savings are even greater, taking into account the benefits in reduced disabilities and higher productivity over the lifetimes of the parents and children involved.

More than 3.6 million babies will be born in our country this year. Eleven of every thousand of those babies will die before their first birthdays, most in their first month of life. Two-thirds of them will die as a result of low birthweight and prematurity, which are the leading causes of death for American babies under the age of one. Low-birthweight babies who survive are more likely to suffer in their mental and physical development. They are also more vulnerable to respiratory, heart, kidney or nervous system disorders which require lifetime care. Today, we know how to prevent many of the current cases of low birthweight and preterm delivery, and we could save many more of those babies from death or disability.

This year, about 250,000 babies will be born under the margin of safe weight: 5.5 pounds. Low birthweight is a primary reason that our overall infant death rate in the United States is worse than in 17 other countries. To put this in context, 30 years ago only six nations had lower infant death rates than the United States. Since then, other countries have made much more and much faster progress than we have.

WIC is one of the federal programs proven to help reduce the incidence of low birthweight. It is a unique food assistance program for our own citizens, appropriate in this country which is so abundant in food and able to feed so many other nations. WIC provides food, education and counseling that stress the importance of good nutrition during pregnancy. It has proven to be a highly successful, national conduit for bringing poor women into prenatal care, a vital element of having a healthy baby. WIC has improved the conditions of pregnancy for millions of American women and the children they bear.

The Administration's proposal for the FY '87 budget includes a shortfall of $15 million below what the budget projects as necessary to maintain current WIC services in FY '87. Currently, WIC only provides food and services to one third of the women, babies and children who qualify.

The March of Dimes supports funding WIC at least to maintain current services; we strongly recommend funding to extend WIC services to more of the mothers and children now eligible. At a time when several states are starting to make efforts to reduce infant deaths, including states with above-average death rates for babies, reducing the federal WIC commitment would be harmful to the health of mothers and children. This is especially true because so many states and local economies are suffering as market trends in oil, agriculture and other industries severely disrupt the living standards of many communities and families.

WIC is especially important in areas of the country with high rates of infant mortality and low birthweight. The Southern Governors Task Force on Infant Mortality has recommended federal, state and local initiatives to decrease the incidence of infant mortality. The March of Dimes is working on the Southern Regional Project to help achieve this goal.

A good example of state effort is Chairman Jamie Whitten's home state of Mississippi. Mississippi is second only to this very District of Columbia in its high death rate for babies and the incidence of low weight at birth. This May, as part of the Southern Regional Project, the state will host a seminar of legislators, the business community, and voluntary organizations to work as partners to solve this statewide problem. This kind of state leadership must be supported through full funding of programs such as WIC.

What are the national benefits of investing in WIC services? The Harvard School of Public Health has reported that for every dollar spent in the prenatal care component alone of WIC, three dollars are saved in hospitalization costs for low-birthweight babies, because fewer babies are born in a condition to need newborn intensive hospital care. In 1984, at the request of the Senate Agriculture Committee, the General Accounting Office (GAO) studied WIC and found that participation in WIC correlates with a 16-20 percent decrease in the proportion of low-birthweight babies born to mothers who qualify for WIC assistance.

The U.S. Department of Agriculture evaluated WIC and concluded that its services significantly and positively affect the length of pregnancy and a child's weight at birth. WIC programs also increase early and regular use of prenatal care.

What are the consequences of not investing in care for pregnant women? What does high infant mortality cost the nation?

First -- the actual lives lost because of low birthweight, prematurity and other birth defects are only part of the picture.

Before they die, those babies and their families undergo agonizing periods of intensive care, drastic resuscitation efforts, and last-resort medical treatment.

Second -- according to the latest report by the Institute of Medicine, this country spends more than $1.5 billion every year on only newborn intensive care, most of which is due to low birthweight.

Average medical costs for one normal delivery are already more than $3,000. If that baby is born too small or too soon, costs soar up at a dizzying rate -- ranging from several thousands to hundreds of thousands of dollars for one baby. You can grasp the exorbitant national costs when you remember that up to 7 percent of the 3.6 million babies born every year suffer low birthweight.

The American Journal of Obstetrics and Gynecology has just published a study of one community and its hospital's experience. One hundred women had received regular, basic prenatal care: periodic visits to a doctor, nutritional guidance and support, education, etc.. Another group of 100 women, matching the first group in socioeconomic standards, had delivered their babies _without_ adequate prenatal care.

The babies whose mothers did not get care during pregnancy were more than six times as likely to be premature. They were four times as likely to weigh less than 5.5 lbs. -- the standard of safe weight. They were almost three times as likely to be placed in intensive care. The average costs of hospital care for babies who lacked adequate prenatal care were more than twice the costs of the other group. Even counting the cost of basic prenatal care, the average difference between babies in each group was $2,200 per birth.

The total? This one hospital spent almost $900,000 more _every year_ on babies whose mothers did not get prenatal care than on babies whose mothers did. Those figures could be matched by hundreds of hospitals everywhere in this country, in every state and district.

That's a substantial loss. On the other side of the ledger, making sure that American women can get decent care while pregnant results in substantial savings and at least a three-fold return on our investment. WIC, the Supplemental Food Program, is a cornerstone of the small effort we currently make to invest in our future, in the person of the pregnant American woman and the child she bears.

The March of Dimes Birth Defects Foundation supports, at minimum, the funding of WIC with the $1.632 billion that will maintain current assistance to the one-third of eligible women and children it is now able to serve. Given the concern about reducing federal budget deficits throughout the decade, and the conviction that it is wrong to deprive the next generation of a sound future, both in finance and in good health, the March of Dimes recommends that Congress should:

* claim the large savings to be gained through preventive health care, especially good nutrition and access to prenatal care;

* make a comprehensive national commitment to reduce infant deaths and the incidence of low birthweight, part of which should include nutrition supplementation programs like WIC;

* and increase funds for the WIC program, which many studies have proven to be highly cost-effective, so that it may expand to reach at least 50 percent of the women and children currently eligible, many of whom are not now assisted.

Thank you.

HOUSE COMMITTEE ON APPROPRIATIONS

SUBCOMMITTEE ON AGRICULTURE, RURAL DEVELOPMENT AND RELATED AGENCIES

COMMENTS OF THE AMERICAN HORSE PROTECTION ASSOCIATION, INC. REGARDING FISCAL YEAR 1987 APPROPRIATIONS FOR THE ANIMAL AND PLANT HEALTH INSPECTION SERVICE

The American Horse Protection Association, Inc., appreciates this opportunity to express its views concerning the proposed elimination of funding for enforcement of the Horse Protection Act of 1970 by the Animal and Plant Health Inspection Service during Fiscal Year 1987.

AHPA is a non-profit humane society dedicated to the welfare of horses and other equines. It was originally founded in 1966 to fight the cruel practice of pain-training, or "soring", gaited show horses, especially the Tennessee Walking Horse. The elimination of soring has remained a high priority for the Association, and it has avidly followed the Agriculture Department's program to enforce the Horse Protection Act. During the past four years the Association's representatives have attended approximately 20 Walking Horse shows throughout the Nation to monitor industry self-enforcement efforts as well as the adequacy of APHIS enforcement. In addition, the Association regularly receives information from humane-minded owners and trainers within the industry concerning the types and frequency of soring practices being employed.

"Soring" is accomplished by inflicting pain to a horse's lower front limbs in order to produce a high-stepping, far-reaching stride known as the "big lick." When Congress strengthened the Horse Protection Act by amendment in 1976, it recognized that sophisticated forms of pain-training were being devised by unscrupulous owners and trainers in an effort to frustrate detection. As a result, Congress authorized appropriations of up to $500,000 per fiscal year for enforcement of the Act. In recent years, however, APHIS has asked for only about $150,000 annually.

Soring has by no means been eliminated from the Walking Horse industry. Although APHIS has brought very few enforcement actions during the last four years, AHPA's investigations have convinced it that the incidence of soring is much higher than USDA enforcement statistics imply. One possible explanation is that horse exhibitors are using short-action painkillers to permit a sore horse to pass the pre-show inspection that is the principal enforcement mechanism under the Horse Protection Act. Another is that USDA regulations themselves permit the use of "action devices" and shoeing techniques that have been determined by APHIS-sponsored research to be capable of soring horses. These regulations are the subject of litigation between AHPA and the Department, because the Department has refused to modify them.

Finally, an important factor inhibiting adequate enforcement is that since 1981 APHIS has not employed the Thermovision, a device that measures inflammation (and therefore pain) in an objective fashion through the use of an infrared camera. Current enforcement is based on evaluation of a number of subjective factors in a horse's behavior, on the theory that particular types of behavior indicate pain. Unfortunately, no horse reacts in exactly the same way to pain, nor do all inspecting personnel (industry or APHIS) interpret the varying degrees of equine behavior ("nervousness," "sensitivity", "pain") in a completely consistent fashion. Congress recognized in 1976 that use of the Thermovision would help eliminate the imprecision of detecting soring; one reason for its funding authorization was to provide enough money to use the Thermovision at as many shows as possible.

As a result of these factors, AHPA believes that many sore horses are being shown, and escaping detection. In fact, detection is not always easy -- few, if any, horses today bear the open, bloody wounds or huge callouses that characterized soring in the early 1970s. Nevertheless, AHPA has witnessed numerous incidents in which horses that are clearly in pain have passed inspection; its investigators have seen horses that can barely walk 30 minutes before inspection miraculously show no signs of pain when their pasterns are palpated. Other horses have been passed despite what appears to be a painful reaction to examination with the excuse that they are high-strung or nervous.

Funding for Horse Protection Act enforcement should be increased, not eliminated. APHIS needs the use of the Thermovision, and needs more veterinarians at more horse shows to fight the subtle, but nevertheless real, pain-training techniques being used today. For these reasons, AHPA recommends that the Subcommittee appropriate $250,000 for the Horse Protection Act program in FY 1987. Congress's 16-year committment to the humane treatment of show horses must not be negated by a zero-funding mentality at the Department.

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4/21/86

House of Representatives

Appropriations Committee

Jamie Whitten, Chair

Hearings April 16, 1986

Regional Aquaculture Administrative Centers

Written Communication

My name is Raymond A. Moore, Director, Agricultural Experiment Station, and Associate Dean, College of Agriculture and Biological Sciences, South Dakota State University, Brookings. I also serve as chair of the North Central Association of Agricultural Experiment Station Directors. This statement is presented in my capacity as chair of the twelve-member Association. As you know, these Agricultural Experiment Stations are integral parts of the Land Grant Universities in the North Central States of Ohio, Michigan, Indiana, Illinois, Wisconsin, Minnesota, Iowa, Missouri, North Dakota, South Dakota, Nebraska, and Kansas.

On Wednesday, April 16, 1986, testimony was received by your committee on legislation seeking appropriations for four regional aquacultural Centers under authority of the "Farm Bills" in 1977, 1981, and 1985 (PL 99-198, Dec. 23, 85, Sec. 1429). It is my understanding that at least four states (Massachusetts, Mississippi, Washington, and Hawaii) are seeking activation of this authority through appropriations with specific universities being suggested as the location for such centers.

I wish to make two main points: (1) All regions of the country with "regional aquaculture opportunities..." (Sec. 1429, PL 99-198.12/23/85) should be equitably served by a regional aquaculture center when they are funded. If this criterion was followed, the regional organization of the USDA Cooperative State Research Service could function excellently as it has served to provide regional cohesion in the past. It should be adopted as a framework for funding aquaculture centers. Thus, there would be a Center in the Northeast, South, North Central, and Western Regions under a four-region authorization. Since the type of aquaculture is partially climate determined, Congress might want to consider a special authorization for Tropical Aquaculture. Within this framework, a Center within the North Central States is eminently justified.

(2) Aquaculture is an important agri-industry in the North Central States today and offers an economic opportunity for a region that finds much of its agriculture under financial stress and transition. Its potential growth can be seen in the clear upward trend in per capita consumption of fish. No clear indicators of a slackening in this trend are evident. As problems with the ocean fishing continue to mount and foreign importation becomes less feasible, aquaculture in all regions of the United States will continue to grow.

Aquaculture businesses are established in the North Central States from catfish in the southern portion of the region and to cold water species such as trout, walleye and perch in the north. Further, the universities in the region have been conducting significant research. A sample of these programs include fish nutrition in Michigan; fish nutrition, genetics and reproductive physiology, Wisconsin; genetic and gene transfer technology, Minnesota; genetics, Indiana; and production technology in Illinois, Iowa, and South Dakota. The list of both research projects and participating universities is extensive and scientifically strong. For a developing industry it is important to expand this existing research base to underpin production practices as has been accomplished with our crop and livestock sectors.

Trout, salleye, catfish, and perch are being produced commercially for food and stocking. This North Central industry is expanding and becoming established in market channels. Also, commercial bait and fingerling production are important aquaculture components. The North Central States are developing state aquaculture plans. These plans are a cooperative effort combining industry, state government and universities. A regional center could strengthen plan development by providing a facilitating and communications network. Such a service is important for a developing industry.

The industry in each of the North Central States is organized into associations to represent their interests in marketing and policy. A regional center would play an important role in disseminating information through these organizations and focusing their efforts to speed economic development. Industry leadership is supportive and will provide strong input to making a regional aquaculture center a successful contributor to this growth industry.

In summary, I urge that the regional framework of the USDA Cooperative State Research Service be utilized to establish the regional aquaculture centers. The selection of the location for the Center could be a competitive procedure, within each region, established through USDA Cooperative State Research Service.

The North Central States have base research and extension programs which are funded from state, Sea Grant, USDA, and other sources. These programs must be strengthened as the industry and regional production continue to grow. A North Central Regional Aquaculture Center would provide leadership with the existant industry in cooperation with the Agricultural Experiment Stations. In considering the location of a Regional Aquaculture Center the North Central States should receive a high priority.

COUNTY OF LOS ANGELES

WATERSHED COMMISSION

P.O. BOX 3009, TERMINAL ANNEX
LOS ANGELES, CA. 90051
(213) 267-2476

OFFICERS

LEE EMBREE
CHAIRMAN

BETTY SHERMER
VICE-CHAIRMAN

TO: CONGRESSMAN WHITTEN

FROM: COMMISSIONER JAMES C. COOK

SUBJECT: SUPPORT OF FUNDING FOR THE SOIL CONSERVATION SERVICE AND LOS ANGELES COUNTY FIRE DEPARTMENT

To insure adequate funding for the Los Angeles County Watershed this commission is requesting your support of funding for two specific agencies. The agencies are the Soil Conservation Service and the Los Angeles County Fire Department.

The support necessary for the Soil Conservation Service is the continued funding for flood prevention operations as authorized by Public Law 78-534. The total amount funded in FY-86 (after sequestering) was 22.3 million. The administration's proposed FY-87 funding is 0 million. This commission along with the Southern California Watershed Fire Council and several communities within L.A. County is reccommending that the FY-87 funding be 24.0 million in order to maintain the existing flood prevention structures that reduce impacts of fire and flooding on downstream urban areas.

The support necessary for the Los Angeles County Fire Department is to maintain the existing level of fire protection in the watershed areas. Due to the lack of federal funding support to Los Angeles County and to the federal government's implementation of the Fair Labor Standards Act the Forester

REPRESENTING THE FOLLOWING COMMUNITIES AND AGENCIES WITHIN LOS ANGELES COUNTY:

ALTADENA
ANTELOPE VALLEY
ARCADIA
AZUSA
CLAREMONT
BRADBURY
BURBANK
GLENDORA
DUARTE
GLENDALE
LA CANADA FLINTRIDGE
LA CRESCENTA
LA VERNE
LOS ANGELES
MONROVIA
PASADENA
POMONA
SAN DIMAS
SAN FERNANDO
SIERRA MADRE

NORTHWEST ANGELES FOREST, SANTA MONICA MOUNTAINS, L.A. COUNTY FIRE DEPT., L.A. CITY FIRE DEPT., THE LOS ANGELES COUNTY FLOOD CONTROL DISTRICT, THE ROAD COMMISSIONER, THE U.S. FOREST SERVICE, PACIFIC SOUTHWEST FOREST AND RANGE EXPERIMENT STATION, GLENDORA, THE ANGELES NATIONAL FOREST, THE DIVISION OF FORESTRY OF THE DEPARTMENT OF NATURAL RESOURCES, STATE OF CALIFORNIA, THE LOS ANGELES CHAMBER OF COMMERCE, THE WATERSHED FIRE COUNCIL OF SOUTHERN CALIFORNIA.

and Fire Warden portion of the Los Angeles County Fire Department's budget has a loss for FY-86-87 of 5.1 million. This loss will necessitate the elimination of :

5 Engine companies
1 Water Tender
1 Paid Camp (25 fire suppression aids)
Lake Hughes Nursery
1 Forestry Assistant
1 Dozer
1 Heavy Equipment Construction Operator
1 Transportation Truck Driver
A reduction of a second paid camp or an additional engine company

These equipment and service reductions will severly hamper the Department's ability to meet it's watershed fire prevention, reforestation, and suppression responcibilities to Los Angeles County. Additionally, the engines that would be eliminated provide direct support to the Angeles National Forest. Also, they are used to assist in mutual aid for wildland fire fighting not only locally but also on a state-wide basis. With all of the impacts shown, the Los Angeles County Watershed Commission is requesting your support in a funding of 5.1 million to be used exclusively to prevent the preposed elimination of the above resources.

Thank you for your attention in this matter,

James C Cook

James C. Cook
Commissioner, Los Angeles County Watershed Commission
Councilman, City of Azusa

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FOREST FIRE PROTECTION AND FIRE RESEARCH FUNDS FOR USDA-FOREST SERVICE FY 1987 BUDGET

February 21, 1986

The Watershed Fire Council of Southern California is a citizens advisory group appointed by the Boards of Supervisors of nine Southern California counties, serving over 15 million people. The Council is dedicated to the conservation, wise use and protection of the Forest and watershed areas from disastrous wildfires. Public costs and losses in Southern California average more than $45 million per year.

The U. S. Forest Service, in cooperation with State, county and municipal fire agencies, is struggling with increasing fire protection problems in areas characterierized by high Forest fire hazards, and increasing use, with the statewide population increasing by more than 400,000 persons annually.

The Council recognizes the critical importance of the National economy. We support the goal of a balanced Federal budget. The Council advocates the most cost effective approach to reducing the deficit in the area of Forest fire and watershed protection. This approach is to fund programs at the level where the majority of wildfires are prevented; or when fires do start, they can be controlled before they become major conflagrations. History, as again demonstrated in 1985, shows that when fire protection forces are reduced below the minimum required for adequate protection, more large fires occur and excessive emergency costs and damages result. During just one period, late June to mid-July 1985, some 40 wildfires raged throughout California. More than 375,000 acres burned. Control costs alone exceeded $45 million. A strong watershed fire protection program is essential. Less than adequate appropriations now will result in far greater future costs in dollars, in soil and water resource losses, flood damages and human suffering.

The Council seeks your support for the following vital and cost effective programs for FY-87. These are consistent with the goal of a balanced Federal budget.

I. FOREST FIRE PROTECTION
(Listed under National Forest System - Land and Resource Protection

Recommended FY-87	182.5 million
Administration's proposal FY-87	147.2 million
Funded FY-86 (Before Sequestering)	156.7 million
Funded FY-86 (After Sequestering)	151.4 million
Funded FY-85	156.7 million

The Council's recommended FY 87 appropriation is the same as for the most cost efficient program calculated by the current National Fire Management Analysis. This level of appropriation will provide a program which produces the lowest cost considering the sum of this appropriation, expected wildfire suppression expenditures, and expected net resource value changes due to wildfire.

Though Congress recognizes the most cost efficient funding level, they have been unable to totally fund this level to date (the 1986 Budget Explanatory Notes for Committee on Appropriations, pages 134-144, describe the most efficient fire organizations). The proposed 1987 funding is almost $35.3 million below the most efficient level as based on economic analysis.

Congress has budgeted funds at a stable level during recent years. However, there have been sharp increases in the costs of specialized fire equipment, contract air tankers and helicopters from private industry, payrolls, rents and utilities. These costs have risen faster than the rate of inflation. In addition, the Forest Service has had to shift a portion of its budget to do important Forest Planning. As a result, there have been reductions in firefighting forces, fuels management and fire prevention. During 1985, $700,000 in special fire severity funds had to be made available for the California Region of the Forest Service to respond to the on-going fire season.

Chaparral and related plant communities grow on the majority of watershed areas in Southern California, creating one of the highest natural fire hazards in the world. An objective of the Forest Service and other cooperating fire protection agencies is to manage these plant communities by systematically treating the vegetation to establish a mosaic of various age classes. This provides benefits to other resources; e.g., water, soil, wildlife, as well as for fire protection.

The use of prescribed fire is proving to be cost efficient in establishing the desired mosaics. Mosaics assist in fire protection where the spread of wildfire is slowed and wildfire intensity reduced by the younger vegetation, making safer fire suppression accessibility. Approximately 95,000 acres have been treated by prescribed fire on Southern California National Forests in the last 5 years. This averages 19,000 acres per year. 60,000 acres need to be treated annually in order to create and maintain the desired mosaics. Essential fuelbreaks must be maintained. These measures will eventually reduce the annual National firefighting supplement, now at $70 million.

II. RURAL FIRE PREVENTION AND CONTROL

(Listed under State and Private Forestry - Fire Protection)

Recommended FY-87	21.8	million
Administration's proposal FY-87	3.4	million
Funded FY-86 (Before Sequestering)	13.7	million
Funded FY-86 (After Sequestering)	13.0	million
Funded FY-85	13.7	million

This program provides assistance to State and local governments in providing fire protection on high value watershed and urban/wildland interface areas. A continued Federal, State and local cooperative effort is necessary to protect the Nation's State and private resources; facilitate transfer of new technology; and expand concepts such as shared resources and coordinated management of multi-jurisdictional emergencies. These efforts reduce downstream flood threats and Federal emergency costs. Much of the increased use resulting from population growth is occuring on these privately owned Forest and rural watershed areas. The program needs to be strengthened to ensure adequate protection on both non-Federal lands and adjacent Federal lands.

III. FIRE RESEARCH

(Listed under Forest Research: Land and Resource Protection Research: Fire and Atmospheric Sciences Research)

Recommended FY-87	10.4	million
Administrations proposal FY-87	7.5	million
Funded FY-86 (Before Sequestering)	8.1	million
Funded FY-86 (After Sequestering)	7.7	million
Funded FY-85	7.9	million

Devastating wildfires in California and other states during 1985 again point up the need for a strong National Fire Research Program. Cut-backs in this work have curtailed progress in developing new basic knowledge and methods to meet these problems in the most cost efficient manner. Research is especially needed in the following:

- Better understanding of fire behavior in chaparral type vegetation both in wildlire situations and development of improved prescribed burning guides to help meet fire hazard reduction objectives.

- Develop methods for allocating fire management funds so as to more clearly identify and evaluate the cost/benefits of fire management programs.

- Improve methods to predict weather, both long and short term, with special emphasis on local wind currents in mountainous terrain.

- Better understanding of the interaction of fire and its effects on soil, water, air quality and vegetation.

The budget for research has declined by 25% since FY-82. Restoration of the budget to the 1982 level, adjusted for inflation, is needed to restore the research program to a level where the above vital issues can be addressed.

IV. FLOOD PREVENTION OPERATIONS

(Agricultural Budget - Soil Conservation Service) (Transfer Funds)

Recommended FY-87	24.0	million
Administration's proposal FY-87	0	million
Funded FY-86 (Before Sequestering)	23.2	million
Funded FY-86 (After Sequestering)	22.3	million
Funded FY-85	23.2	million

Two flood prevention projects authorized by Public Law 78-534 involve National Forest land in Southern California for which Congress's intent is to reduce the impacts of fire and flooding on downstream urbanized areas. These are the Santa Ynez and Los Angeles watersheds, both Federal and non-Federal lands.

PL-534 funding has provided for accomplishment of the following prevention measures: 495 miles of fuelbreaks, 419 miles of fire road construction, 1600 acres of road stabilization, 500 channel stabilization structures, 56,000 acres of seeding for slope stabilization, 16,000 acres of chaparral fuel treated by prescribed burning, and a high level of fire protection. These measures have prevented resource losses valued at more than twice the cost of installation.

Fire prediction models indicate that curtailment of on-going work in these watersheds will result in the annual loss of an addition 8500 acres to wildfire and additional suppression cost of $1.6 million. Additional cost of sediment removal and flood damage would be approximately $2.6 million annually.

The Council recommends PL-534 continue to be funded at the FY 85 level to allow for completion of identified critical work.

Respectfully submitted,

David L Sumner
DAVID L. SUMNER, Chairman
Watershed Fire Council of Southern California

COUNTY OF LOS ANGELES
FIRE DEPARTMENT
POST OFFICE BOX 3009, TERMINAL ANNEX
LOS ANGELES, CALIFORNIA 90051

267-2401

JOHN W. ENGLUND
FIRE CHIEF
FORESTER & FIRE WARDEN

March 3, 1986

Dear [illegible]

SUBJECT: GRANT SUPPORT - LOS ANGELES COUNTY, CALIFORNIA
FORESTER AND FIRE WARDEN

The Los Angeles County Forester and Fire Warden is soliciting your support for Federal Grant funding in order that this Department can continue to protect the public without a reduction in fire suppression capabilities.

The Los Angeles County Forester and Fire Warden is faced with the prospect of budgetary reductions during Fiscal Year 1986-87 totaling $5.1 million due in part to the lack of Federal funding support to Los Angeles County.

The following equipment and resultant loss of services are being targeted for elimination.

- -- 5 Engine companies
- -- 3 Water tender
- -- 1 Paid camp (25 Fire Suppression Aids)
- -- Lake Hughes Nursery
- -- 1 Forestry Assistant
- -- 1 Dozer
- -- 1 Heavy Equipment Construction Operator
- -- 1 Transportation Truck Driver
- -- An additional reduction in our camp program or an additional engine company

SERVING THE UNINCORPORATED AREAS OF LOS ANGELES COUNTY AND THE CITIES OF:

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CUDAHY
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WHITTIER

This equipment and service reductions will severely hamper the Department's ability to meet its watershed fire prevention, reforestation, and suppression responsibilities to Los Angeles County. Additionally, these five engines provide direct fire fighting support to the Angeles National Forest. Also, they are resources utilized to assist in meeting our mutual aid obligations for wildland fire fighting, not only locally but also on a state-wide basis.

This equipment is the strategic watershed fire suppression support units allowing the Department to maintain its rapid equipment response, not only supporting the National forests but also the surrounding Counties of Ventura, Orange, Kern, Santa Barbara and San Luis Obispo.

These equipment and service reductions will most definitely affect this Department's ability to reduce the threat of wildland fires to those communities bordering the watershed as occurred throughout California during 1985. (See attachments.)

Additionally, the Department's watershed fire fighting equipment is deteriorating and much of it is requiring immediate replacement. This equipment replacement program's immediate needs are estimated to cost approximately $5,000,000.

This equipment is specifically addressed in the attached correspondence and motions as addressed and supported by the County of Los Angeles Board of Supervisors.

Please let me know if further information is required.

Very truly yours,

John W. Englund
JOHN W. ENGLUND

JWE:cdl

Attachments

COUNTY OF LOS ANGELES
FIRE DEPARTMENT
POST OFFICE BOX 3009, TERMINAL ANNEX
LOS ANGELES, CALIFORNIA 90051

267-2476

JOHN W. ENGLUND
FIRE CHIEF
FORESTER & FIRE WARDEN

February 21, 1986

Lee Embree, Chairman
Los Angeles County Watershed Commission
1942 West Avenue L
Lancaster, CA 93534

Dear Chairman Embree:

SUBJECT: PROPOSED BUDGETARY REDUCTIONS FOR FISCAL YEARS 1985-86 AND 1986-87

Pursuant to your request on behalf of the Los Angeles County Watershed Commission for information on anticipated service reductions in the Department of Forester and Fire Warden which would impact watershed protection within Los Angeles County, the following is provided:

CURRENT FISCAL YEAR 1985-86

When the Board of Supervisors adopted the 1985-86 Budget for the General Fund, there was a 2 percent across-the-board reduction for all General Fund Departments, which includes the Forester and Fire Warden.

In addition to this reduction, there was a 1 percent across-the-board reduction in all General Fund Departments, Services and Supplies Budgets.

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GLENDORA
HAWAIIAN GARDENS
HIDDEN HILLS
HUNTINGTON PARK
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LA CAÑADA FLINTRIDGE
LAKEWOOD
LA MIRADA
LANCASTER
LA PUENTE
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LOMITA
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ROLLING HILLS ESTATES
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SIGNAL HILL
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SOUTH GATE
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The Forester and Fire Warden also had a shortfall in the funding of the six (6) engine companies which were restored in the 1984-85 Budget.

These reductions amount to:

2% F&FW reduction	$ 816,083
1% Services & Supplies reduction	105,370
Shortfall - 6 engine companies	504,203
TOTAL	$1,425,656

In order to accomplish these reductions, it will be necessary to take specified units in the F&FW during Fiscal Year 1985-86 out of service.

Units that will be taken out of service are:

Engines 64, 82, 44, 46, and 325
Patrols 69, 70, and 102
Water Tenders 44, 64, and 73

These units will not be manned for approximately 122, 24-hour shifts. These unit reductions were necessary in order to accomplish the F&FW Budget reduction and do not reflect any projected shortfalls created by the Fair Labor Standards Act.

FISCAL YEAR 1986-87

The Forester and Fire Warden has been instructed to prepare a budget for Fiscal Year 1986-87 which will indicate a 4.6 percent net reduction in appropriations and fund any impacts caused by the Fair Labor Standards Act.

-- The 4.6 percent reduction in appropriations is estimated at 2.8 million dollars.

-- The impact of the federally mandated Fair Labor Standards Act is estimated at $900,000.

The total anticipated budgetary shortfall equates to 3.7 million dollars. The Forester and Fire Warden has insufficient funding to meet this shortfall without a direct reduction of services.

The following equipment and resultant loss of services are being targeted for elimination.

- -- 5 Engine companies
- -- 1 Water tender
- -- 1 Paid camp (25 Fire Suppression Aids)
- -- Lake Hughes Nursery
- -- 1 Forestry Assistant
- -- 1 Dozer
- -- 1 Heavy Equipment Construction Operator
- -- 1 Transportation Truck Driver

- -- A reduction in camp program overhead or an additional engine company depending upon the ability of the Department to convert the paid camp to an inmate camp.

The Departmental services existing during the recent fires occurring through October 1985 will be reduced a total of 5.1 million dollars if the proposed 1986-87 Fiscal Year Budget is implemented.

These equipment and service reductions will severely hamper the Department's ability to meet its watershed fire prevention, reforestation, and suppression responsibilities to Los Angeles County. Additionally, these five engines provide direct fire fighting support to the Angeles Forest. Also, they are resources utilized to assist in meeting our mutual aid obligations for wildland fire fighting not only locally but also on a state-wide basis.

These cutbacks are due in part to the lack of Federal funding support to Los Angeles County.

Any paralleling funding reductions to the National Forest will additionally severely impact fire protection and adversely affect this Department's ability to reduce the threat of wildland fire to those communities bordering the watershed.

Very truly yours,

JOHN W. ENGLUND

By
STEPHEN C. SHERRILL, ASSISTANT FIRE CHIEF
SERVICES BUREAU

SCS:cdl

MINUTES OF THE BOARD OF SUPERVISORS
COUNTY OF LOS ANGELES, STATE OF CALIFORNIA

Larry J. Monteilh, Executive Officer
Clerk of the Board of Supervisors
383 Hall of Administration
Los Angeles, California 90012

Chief Administrative Officer
Forester and Fire Warden

At its meeting held July 23, 1985, the Board took the following action:

68

Supervisor Schabarum presented the following statement:

> "The Forester and Fire Warden provides emergency and routine service which requires the use of helicopters, fire apparatus, and heavy equipment such as dozers, graders, tractor trailers, transports and fire apparatus.
>
> "These items are extremely costly and they have traditionally been replaced as needed, based on age and maintenance costs. Because of the County's fiscal constraints over the last several years the purchase of such equipment has been deferred. Consequently, the Department is having to utilize equipment that is old and, therefore, difficult and expensive to maintain.
>
> "Presently, our helicopters range in age from nine to 18 years. The Department has proposed a helicopter replacement program which considers maintenance costs, accumulated service stress, safety, advancing technology and effectiveness. The proposal indicates that two helicopters are currently due for replacement and that two others will be due for replacement in the near future. The newest of our existing aircraft would be due for replacement within the next ten years. It should be noted that no replacement has ever taken place except in those instances where irreparable damage was incurred and even when replacement was done

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(Continued on Page 2)

JUL 30 1985

Syn. 68 (Continued)

On motion of Supervisor Hahn for Supervisor Schabarum, seconded by Supervisor Edelman, unanimously carried, the Board instructed the Chief Administrative Officer and the Forester and Fire Warden to develop recommendations for the Board to approve, as how to best plan and budget for the replacement of emergency and heavy equipment for the Fire Department.

MIN2:c102.2

Copies distributed:
  Each Supervisor
  County Counsel
  Purchasing Agent

COUNTY OF LOS ANGELES
FIRE DEPARTMENT
POST OFFICE BOX 3009, TERMINAL ANNEX
LOS ANGELES, CALIFORNIA 90051

267-2449

JOHN W. ENGLUND
FIRE CHIEF
FORESTER & FIRE WARDEN

January 29, 1986

TO: DONNA CRUMLEY
BUDGET DIVISION, CHIEF ADMINISTRATIVE OFFICE

FROM: GEORGE DEMOS, DEPUTY FIRE CHIEF
FORESTER AND FIRE WARDEN

SUBJECT: RECOMMENDATIONS ON FORESTER AND FIRE WARDEN EMERGENCY AND HEAVY EQUIPMENT REPLACEMENT

On July 23, 1985 Supervisor Schabarum informed his colleagues on the Board of Supervisors that the advanced age of Fire Department equipment is reaching the critical stage and that replacement is crucial to insure public safety. He also reminded the Board that over the years they have unanimously stressed fire protection as one of the highest priority services of the County.

Subsequently the Board instructed the Chief Administrative Officer and the Forester and Fire Warden to develop recommendations for the Board to approve as how to best plan and budget for the replacement of said equipment.

With the above Board action in mind, I have reviewed the draft report to the Board dated December 10, 1985 which contains the Budget Division's recommendations for equipment replacement.

The report does not adequately cover the replacement of any category of our departmental equipment with the exception of fire engines (pumpers).

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In the category of crew carriers, the recommendation of having the Fire Department defer the replacement of sedans and use the 1985-86 motor vehicle funds consisting of $250,000 to acquire nine crew carriers is very inadequate and therefore not acceptable.

The motor vehicle funding was reduced substantially to $250,000 in the fiscal year 1984-85. At the same time our Department did have need to replace other firefighting equipment such as patrol pumpers and crew carriers out of the same fund. These purchases were made in lieu of a portion of our sedan replacements.

In the 1985-86 budget, our motor vehicle funding remained at the reduced amount of $250,000 and consequently the same purchasing approach was made. Therefore, we have also been falling behind in our normal sedan replacement plan and the above-stated recommendation merely shifts the problem to another area that is also in need.

In the category of heavy equipment, graders and dozers, the Budget Division's recommendation for replacement is to identify any savings which may occur from the transfer of the fire shop to finance lease purchase payments.

The Fire Department does anticipate savings from the fire shop transfer and would use these savings to offset our many needs, but as we previously have discussed, only 25 percent of said savings would be general fund, and we would have to wait until around March 1987 to identify these savings.

In the helicopter replacement category, the recommendation of shifting existing departmental expenditures in order to free up funds for lease payments for two copters totaling $5,000,000 at a time when this Department has shut down six engine companies lacks substance.

RECOMMENDATIONS

1. Helicopter Replacement

Replace one helicopter at a time on a five-year County funded plan with consideration to the following savings:

	Savings	Cost
One twin engine helicopter		$ 2,500,000
Less sale of old helicopter	$ 350,000	
Less 1st yr maint. savings	130,000	
Less 2nd yr maint. savings	100,000	
Less 3rd yr maint. savings	75,000	
Less 4th yr maint. savings	45,000	
Less 5th yr maint. savings	45,000	
Total Savings		745,000
Actual Cost		$ 1,755,000

It is also recommended that a tax-exempt municipal lease purchase plan such as the attached plan submitted by TFC Textron be considered. This particular plan has an added highlight as they would not require an annual helicopter hull insurance premium of $170,000 as the LAC-CAL financing plan does.

2. Other Heavy Equipment Replacement

A. It is recommended that all other heavy equipment including engine pumpers, crew carriers, backhoes, dozers, etc. be placed in one category with a total annual funding of $630,000 allocated to F&FW for heavy equipment replacement. This represents an annual allotment of $150,000 for crew carriers (34) and $150,000 for dozers, graders, etc. in addition to the Budget Division's preliminary recommendation of $330,000 for engine pumper replacement. This approach avoids interest costs.

B. It is recommended that a refurbishment program for crew carriers be initiated with the Facilities Management Department. Preliminary discussion is under way; the Fire Department has identified five crew carriers to refurbish which will represent a savings of $90,000 in the purchase of new equipment.

The funding for refurbishments will be financed from the same heavy equipment fund.

C. This heavy equipment fund is to be analyzed on an annual basis and offset with fire shop and other departmental savings.

GD:am

Attachment

Ch. Sherrill

COUNTY OF LOS ANGELES
FIRE DEPARTMENT
POST OFFICE BOX 3009, TERMINAL ANNEX
LOS ANGELES, CALIFORNIA 90051

267-2401

JOHN W. ENGLUND
FIRE CHIEF
FORESTER & FIRE WARDEN

July 5, 1985

TO: SUPERVISOR EDMUND D. EDELMAN, CHAIRMAN
SUPERVISOR PETER F. SCHABARUM
SUPERVISOR KENNETH HAHN
SUPERVISOR DEANE DANA
SUPERVISOR MICHAEL D. ANTONOVICH

FROM: JOHN W. ENGLUND

SUBJECT: INITIAL SUMMARY - LOS ANGELES COUNTY, REGION I, AND SOUTHERN CALIFORNIA MAJOR FIRE DAMAGE ACTIVITY

The following is an initial summary of fire damage from June 27, 1985 to 0700 hours July 5, 1985 throughout Southern California.

Total major incidents:	35
Acres consumed:	189,070
Residences destroyed or seriously damaged:	137
Other structures:	11
Vehicles:	18
Initial loss estimate:	$30 to $35 million
Fatalities:	5
Critical injuries to civilians:	6

SERVING THE UNINCORPORATED AREAS OF LOS ANGELES COUNTY AND THE CITIES OF:

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WHITTIER

FIRES STILL BURNING

THE WHEELER FIRE (Ojai - Ventura County)

Consumed approximately 75,000 acres and considered 50 percent contained. Fire progress has slowed near Carpenteria due to reduced temperatures and increased humidity.

THE LAS PILITAS FIRE (San Luis Obispo)

Fire has consumed approximately 30,000 acres and is 40 percent contained.

No additional major brush fires have occurred since the July 3, 1985 update memo provided to your Honorable Board.

LOS ANGELES COUNTY

All fires within Los Angeles County are contained at this time.

Acres consumed: 4,115
Structures: 53 homes destroyed and 15 damaged
Dollar loss: Estimated above $15 million
Fatalities: 3
Injuries, civilian: 3, critical

REGION I

(other than Los Angeles County Fires)

County	Acres	Homes Lost	Fatalities	Civilian Injuries
Orange	1,000		2	3
San Luis Obispo	30,000	3		
Santa Barbara	1,000			
Ventura	1,570			
Los Padres National Forest	78,000			
TOTAL	125,070	3	2	3

SOUTHERN CALIFORNIA FIRES
(other than Region I and Los Angeles County Fires)

County/ Jurisdiction	Acreage	Homes Lost	Fatalities	Injuries
Riverside	30,210			
San Diego	16,920	66		
Tuolomne	530			
Monterey	2,800			
Placer	1,000			
Kern	7,000			
Sequoia N.F.*	8,100			
Yosemite N.P.**	1,000			
Sierra N.F.*	540			
Cleveland N.F.*	150			
TOTAL	59,882	66		

*National Forest
**National Park

A finalized summary of fire activity will be forthcoming when agency incident commanders update their statistics.

JWE:cdl

COUNTY OF LOS ANGELES
FIRE DEPARTMENT
POST OFFICE BOX 3009, TERMINAL ANNEX
LOS ANGELES, CALIFORNIA 90051
267-2401

JOHN W. ENGLUND
FIRE CHIEF
FORESTER & FIRE WARDEN

October 18, 1985

TO: SUPERVISOR EDMUND D. EDELMAN, CHAIRMAN
SUPERVISOR PETER F. SCHABARUM
SUPERVISOR KENNETH HAHN
SUPERVISOR DEANE DANA
SUPERVISOR MICHAEL D. ANTONOVICH

FROM: JOHN W. ENGLUND

SUBJECT: SUMMARY - LOS ANGELES COUNTY AND CALIFORNIA MAJOR FIRE ACTIVITY, 0800 HOURS, OCTOBER 18, 1985

The following is a summary of fire activity as of 0800 hours, October 18, 1985:

DECKER/PIUMA - Malibu/Los Angeles County

Date/Time Started:	10-14-85 at 1025 hours
Acreage:	11,000
Containment:	100%
Cause:	Incendiary

Losses on the Decker Fire totaled $589,000 including contents:

3 homes destroyed or damaged
4 guest homes destroyed
2 mobile homes destroyed
8 miscellaneous structures destroyed or damaged
3 vehicles destroyed or damaged

Losses on the Piuma Fire totaled $850,000 including contents:

2 homes destroyed
3 miscellaneous structures destroyed
3 vehicles destroyed

Total loss of the two fires is $1,439,000.

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TEMPLE CITY
WALNUT
WESTLAKE VILLAGE
WHITTIER

MALIBU CREEK - Malibu State Park/Los Angeles County

Date/Time Started:	10-14-85 at 1136 hours
Acreage:	150
Containment:	100%
Cause:	Incendiary
Loss:	None

PIONEER/BOX - Box Canyon/Los Angeles County/Ventura County

Date/Time Started:	10-14-85 at 1337 hours
Acreage:	1,600
Containment:	100%
Cause:	Under investigation
Loss:	2 trailers, 6 outbuildings

LA TUNA CANYON: - Sun Valley/Los Angeles City

Date/Time Started:	10-14-85 at 0930 hours
Acreage:	100
Containment:	100%
Cause:	Under investigation
Loss:	None

PALOS VERDES - Palos Verdes/Los Angeles County

Date/Time Started:	10-14-85 at 1753 hours
Acreage:	5
Containment	100%
Cause:	Under investigation
Loss	None

SOUTH HILLS - Glendora/Los Angeles County

Date/Time Started:	10-14-85 at 2103 hours
Acreage:	70
Containment	100%
Cause:	Under investigation
Loss:	None

MESSENGER FLATS - Mt. Gleason/U. S. Forest Service/ Los Angeles County

Date/Time Started:	10-14-85 at 1536 hours
Acreage:	1,250
Containment:	100%
Cause:	Under investigation
Loss:	None

LINCOLN HEIGHTS - Lincoln Heights/Los Angeles City

Date/Time Started:	10-14-85 at 1100 hours
Acreage:	20
Containment:	100%
Cause:	Under investigation
Loss:	1 dwelling, 1 trailer, 5 outbuildings

MT. BALDY - U. S. Forest Service/Los Angeles County

Date/Time Started:	10-14-85 at 1128 hours
Acreage:	60
Containment:	100%
Cause:	Under investigation
Loss:	None

HUMMINGBIRD - Rocky Peak/Simi Valley/Ventura County

Date/Time Started:	10-15-85 at 1116 hours
Acreage:	3,000
Containment:	100%
Cause:	Under investigation
Loss:	2 structures

FERNDALE/WHEELER - Foster Park/Ventura County

Date/Time Started:	10-15-85 at 1200 hours
Acreage:	42,500
Containment:	30%
Cause:	Under investigation
Loss:	8 dwellings, 5 mobile homes, 21 outbuildings, 1 office, 20 vehicles

TAPO CANYON - Tapo Canyon/Ventura County

Date/Time Started:	10-15-85 at 1500 hours
Acreage:	16,000
Containment:	100%
Cause:	Under investigation
Loss:	None

PEACH HILL - Moorpark/Ventura County

Date/Time Started:	10-15-85 at 1600 hours
Acreage:	4,500
Containment:	100%
Cause:	Under investigation
Loss:	1 dwelling damaged, 2 fire fighters burned

Fire units are being demobilized as the fires are extinguished. Operations will be returning to normal levels of manning by October 18, 1985.

JWE:am

cc: James C. Hankla - Chief Administrative Officer

Santa Clara Valley Water District

5750 ALMADEN EXPRESSWAY
SAN JOSE, CALIFORNIA 95118
TELEPHONE (408) 265-2600

March 7, 1986

Dear Chairman Whitten:

The Santa Clara Valley Water District, sponsoring resource conservation districts, and local cities in Santa Clara County, are extremely concerned over continued proposals of the Administration to eliminate watershed planning and flood prevention programs of the U. S. Soil Conservation Service (SCS). We are strongly opposed to the proposals for elimination of these programs in the President's fiscal year 1987 budget and to the President's fiscal year 1986 recision request pending with Congress to freeze construction funding during the current fiscal year.

The ongoing P.L. 566 Small Watershed Program of SCS in Santa Clara County, California is vital, with respect to flood control and agriculture, and must continue to be assured. We simply cannot afford the immense financial burden and flood hazards which would otherwise result should such assistance be terminated.

The magnitude of our concerns can best be illustrated by the fact that, in this County alone, we are currently cost-sharing with SCS on over $30 million in flood control improvements which are under construction. Further, cost-sharing is anticipated on another $27 million in similar improvements which are now in various stages of planning or design.

It is our view that the Administration's proposals relative to SCS are perhaps shortsighted. Although we certainly support the goal of balanced budgets and a reduced deficit, we disagree with attempts to do so at the expense of such sound, low cost, long-term programs as those so effectively administered by SCS.

SCS has consistently attempted to minimize requested appropriations in efforts to help reduce overall federal spending while keeping its many cost-effective programs intact. However, the drastic cuts now proposed would essentially eliminate its role as one of the most effective water resources agencies (with one of the highest project construction to planning ratios) in the nation.

We, therefore, urge your strong opposition to the recision of already appropriated 1986 construction funds and the elimination of these important programs. We further urge your strong support for appropriations in fiscal year 1987 and thereafter that will ensure the Soil Conservation Service's very important and essential continuing role in conservation and resource protection nationwide.

Sincerely,

ORIGINAL SIGNED BY

Patrick T. Ferraro, Chairman
Board of Directors

cc: (see attached list)

AN AFFIRMATIVE ACTION EMPLOYER

STATEMENT OF THE AMERICAN HONEY PRODUCERS ASSOCIATION PREPARED FOR THE APPROPRIATIONS SUBCOMMITTEE ON AGRICULTURE, RURAL DEVELOPMENT, AND RELATED AGENCIES

March 20, 1986

Mr. Chairman, and members of the subcommittee:

I am Glenn Gibson, President of the American Honey Producers Association, a nation-wide organization of honey producers and/or beekeepers. We have members in 41 states. Our group is the only nation-wide honey industry organization where the voting privileges are limited to producers only. Non-producers are welcome, but they are not permitted to vote.

WE APPRECIATE THIS OPPORTUNITY TO MAKE RECOMMENDATIONS FOR BEE RESEARCH FUNDING.

STATISTICAL ESTIMATES

For the Subcommittee's information over 210,000 beekeepers who produce honey, beeswax and offer pollination services to other segments of agriculture are divided into three groups:

200,000 hobbyists, owning less than 25 colonies, or beehives;
10,000 sideliners, owning 25 to 300 colonies, or beehives; and
1,700 commercial, owning 300 or more colonies.

Total ownership in the U.S. is currently estimated to be 4.2 million colonies. Hobbyists and sideliners own 50 percent of the nations beehives and produce 40 percent of the honey (15 percent for hobbyists and 25 percent for sideliners). Commercial beekeepers own the balance and produce 60 percent of the honey.

Hobbyist beekeepers, especially those with a few colonies, usually do not sell commercially. Instead, their production goes for home use and gifts for friends and relatives.

over

Sideline and commercial beekeepers market their production in several ways. Some pack and distribute their honey to neighboring grocery stores and operate retail outlets -- such as roadside stands. Most of the country's domestic production is sold to packers who in turn distribute to the food trade. Our average annual production has hovered around 200 million pounds. However, the 1984 and 1985 crops were well below the average.

FEDERAL BEE RESEARCH

The Agricultural Research Service, USDA, funds bee research in six field laboratories:

Tucson, Arizona	Baton Rouge, Louisiana
Beltsville, Maryland	Madison, Wisconsin
Weslaco, Texas	Logan, Utah
Stillwater, Oklahoma	

The total budget for these studies is approximately $3 million.

The Department of Agriculture recommends the continuation of the present programs at the approximate same level of funding with 2 exceptions:

- * The research activities at Stillwater, Oklahoma will be terminated.
- * The Madison, Wisconsin laboratory will be closed.

We agree with the decision to close the Stillwater activities, but do not concur with the Madison decision.

CLOSING MADISON???

The honey industry will suffer in the coming years if the Madison lab is closed. If the Department's decision prevails, all bee labs will be located in the South. This might be a proper decision for work that will be needed on the pest invasion from the South (Mites), but what will we do when these pests become established in all parts

more

of the country? Big laboratories may appear more efficient to the Administration, but too often the people in it are driven in one direction by the leader. We doubt that closing Madison will result in saving of funds.

A NEW BEE RESEARCH PROJECT

We hesitate to mention new projects since this usually calls for additional funding. However, in this case, we suggest that the Department examine ongoing projects and seriously consider a study that would revise and update all statistical data relative to honey production, pollination (paid-free to wildlife, agriculture, home gardens and orchards), imports, etc.

The need for better data has been brought forcibly to our attention these last 4 years when a mountain of misinformation was circulated up and down the halls of Congress. As a result of this, a number in Congress view the beekeeper as a subsidy hog who will be plagued with Africanized bees sometime in the near future. The recent report of the General Accounting Office on the Honey Price Support Program is a good example of an agency's attempt to make a factual and coherent report with a scanty source of data. Fortunately for us, members of the Committees on Agriculture understood our problem. Commenting on the GAO report Congressman Kika De La Garza told the House:

> "Yes, I have read the GAO report. It is not as factual as it could be. It deals in a vacuum. I found arguments that I could challenge in some areas of the GAO report...."
> Congressional Record 10/7/85.

This study would clear up the pollination story and accurately establish the value of our industry to other segments of agriculture and the environment.

over

OUR RECOMMENDATIONS

1. Keep the Madison lab open.
2. Allot funds for the Varroa mite study in Brazil
3. Approve a new research project that would update the industry's statistics.

Please give these items your serious attention.

Respectfully Submitted

Glenn Gibson, President
American Honey Producers Assn.
P.O. Box 368
Minco, Oklahoma 73059
Phone 405-352-4126

THE MICHIGAN POTATO INDUSTRY COMMISSION

April 14, 1986

The Honorable Jamie Whitten, Chairman
SubCommittee on Agricultural Appropriations
2362 Rayburn House Office Building
Washington, D.C. 20515

SUBJECT: Cooperative States Research Service
Special Research Grant Proposal

Dear Congressman Whitten:

Enclosed is a proposal to be included in the Public Witness Hearing. This proposal addresses the reduction of scab in potatoes and is asked to be funded for five years.

The growers of processing potatoes in the state of Michigan feel that if scab is not eliminated as a disease of potatoes, most of them will not be able to continue in the potato industry.

The proposal is outlined with supporting addendums which are also enclosed and labeled.

If further information is needed, please contact the Commission office or Allan Reese at the numbers listed below.

Sincerely,

Richard W. Shiels
Richard W. Shiels
Chairman, MPIC

Allan D. Reese
Allan D. Reese
Chairman, Research Committee
Phone: 616/537-2176

enclosures

cc: J. Robert Traxler
Guy VanDerJagt
William Schuette
Robert Davis
John Dingell
Carl Levin
Donald Reigle
Thad Cockran
Dr. Terry Kinney
Dr. Ray Hammerschmidt
Dr. Mel Lacy
Dr. Richard Chase

THE MICHIGAN POTATO INDUSTRY COMMISSION • 13109 SCHAVEY RD., SUITE 7 • DEWITT, MI 48820 • (517) 669-8377

POTATO SCAB

PROPOSAL FOR REDUCING
THE INCIDENCE OF SCAB
ON POTATOES IN MICHIGAN

FROM: The Michigan Potato Industry Commission
13109 Schavey Road, Suite 7
DeWitt, Michigan 48820

TO: The Honorable Jamie Whitten, Chairman
SubCommittee on Agricultural Appropriations
2362 Rayburn House Office Building
Washington, D.C. 20515

BACKGROUND INFORMATION

The preceding research on scab is available from USDA-ARS. As stated in the position paper (Addendum 1) that although this disease has been studied for over 100 years, the complete control of the disease is not at hand. many of the present research projects related to scab are limited to a screening program to rate resistance and presently most of the tolerant varieties have two very glaring handicaps--they either don't yield or don't process.

The potato industry of the state of Michigan feels that the presence of scab is the single most economically negative factor involved with the production of processing potatoes.

Being this disease is of such economic significance, the Michigan Potato Industry Commission has spent a great deal of time inputting emphasis on the severity of scab to the various departments at Michigan State University. Because of the concern expressed by the Michigan Potato Industry Commission, Drs. R. Hammerschmidt and M. L. Lacy of the Department of Botany and Plant Pathology and Dr. R. W. Chase of the Department of Crop and Soil Science submitted for our review a "Potato Scab Position Paper" and a budget request. These two items were reviewed by the Research Committee of the Michigan Potato Industry Commission and are submitted herein for consideration of a Special Research Grant under Cooperative States Research Service.

ECONOMIC SIGNIFICANCE OF SCAB ON POTATOES

The cost of scab to three companies that process potatoes in Michigan are addressed in Addendum numbers 2, 3 and 4. Ore-Ida Foods and Frito-Lay purchase potatoes in other states as well as Michigan.

The cost of scab to individual growers is significant to the point of being devastating. One of many horror stories involves a grower of chipping potatoes in southern Michigan. This grower states that his grading loss due to scab this year is approaching $100,000. This grower feels that to use current recommendations to combat scab would be either impractical or cost prohibitive.

Another grower of seed of chipping varieties, whose farm is in the Upper Peninsula of Michigan, stated that his grading losses due to scab are at least $42,000 and he has only half of his seed graded at this writing.

Scab is a significant negative income factor in Michigan potato production. The growers who grow processing potatoes (chips and fries) presently are the most severely affected, but growers of fresh market potatoes are becoming affected as new susceptible varieties are being produced.

A potato grower has to consider the crop grown on the land the previous two years. For potato growers, crops that offer the greatest economic return are also the crops that create an ideal environment for the development of scab.

The grower selects the variety that the processor will accept. Many times this variety is highly susceptible to scab. Other varieties that are tolerant to scab are not generally acceptable to the processor, therefore severely limiting alternatives.

The most frustrating situation is that as you increase the productivity of the soil, the severity of scab also increases.

The economic significance of scab is felt by every grower of processing potatoes in the United States.

SUPPORT OF RESEARCH

The Michigan Potato Industry Commission has spent a great deal of time developing a close relationship between the Commission and the research group at Michigan State University. The Commission has prioritized the areas of research needs and Michigan State University has submitted research proposals to the Commission addressing those needs. The research needs of the industry are reviewed annually by the Research Committee of the Commission. This review includes evaluating previous or ongoing research projects that the commission supports with its own funds. The funding level in 1985 was $54,210 and in 1986 the level will be $70,100 to the Michigan State University research group.

The Research Committee of the Michigan Potato Industry Commission is a vehicle with a long history of supporting and overseeing research that is intended for the betterment of the potato industry in the state of Michigan.

The Michigan Potato Industry Commission recognizes that consumer acceptance of our products is of utmost concern and the adverse effects of scab is a major obstacle to that acceptance.

THE MICHIGAN POTATO INDUSTRY COMMISSION

POTATO SCAB POSITION SUMMARY

Although the scab disease of potatoes, caused by Streptomyces scabies, has been studied for over 100 years and several approaches for the control of this disease have been developed, no unified approach directed at the control of this disease has been universally accepted. Part of this problem can be related to a lack of fundamental information on how the proposed control measures work (and why they fail), the ecology of the pathogen, the nature of the host-parasite interaction between the pathogen and potato, and the genetic basis of disease resistance.

Four researchable areas that show promise in finding solutions to the scab problem are identifiable. The first area consists of a thorough evaluation of currently recommended as well as experimental control approaches. This area of research would provide a base from which to exploit all current knowledge and research as well as provide feedback for other research areas. The second area involves a study of the ecology of S. scabies. Little is known about the population dynamics of this pathogen in the soil as it relates to disease, the interaction of the pathogen with other microorganisms in the soil, and the relationship of soil chemistry to the pathogen. This research could lead, for example, to better biological control through the identifcation and exploitation of naturally occurring antagonists. The third area involves understanding the molecular basis of pathogenicity and resistance. This research would lead to a better understanding of why S. scabies causes disease and how resistant plants defend themselves. This type of knowledge could lead to control measures based on genetic engineering of Streptomyces species that could outcompete or otherwise interfere with the pathogen and give insight into how to increase resistance in the plants by enhancing the plants own defense mechanisms. The fourth area would involve understanding the genetics of resistance to scab. This research would be directed toward improving conventional breeding for scab resistance as well as identifying the genes for resistance. Identification of the genes for resistance, in conjunction with a thorough understanding of the mechanisms of resistance and pathogenicity identified above, could lead in the future to the direct incorporation of resistance into currently acceptable varieties by biotechnological means.

A concentrated and integrated research effort on all four areas will provide new information that will be of great value in attempting to find solutions to the scab problem not only in Michigan, but in all potato growing areas.

THE MICHIGAN POTATO INDUSTRY COMMISSION • 13109 SCHAVEY RD., SUITE 7 • DEWITT, MI 48820 • (517) 669-8377

THE MICHIGAN POTATO INDUSTRY COMMISSION

BUDGET (YEAR 1)

SALARIES	$50,000
EQUIPMENT	15,000
MATERIALS/SUPPLIES	25,000
TRAVEL*	6,000
COMPUTER COSTS	3,000
PUBLICATION COSTS	1,000
TOTAL	$100,000

*Includes instate travel for plot research and outstate travel for professional meetings that will enhance the research effort.

THE MICHIGAN POTATO INDUSTRY COMMISSION • 13109 SCHAVEY RD., SUITE 7 • DEWITT, MI 48820 • (517) 669-8377

ADDENDUM 1

POTATO SCAB POSITION PAPER

R. Hammerschmidt and M.L. Lacy
Department of Botany & Plant Pathology
R.W. Chase
Department of Crop and Soil Science
Michigan State University

INTRODUCTION

The scab disease of the potato, caused by Streptomyces scabies, can cause serious yield losses as a result of a decrease in tuber quality. Although this disease has been studied for over 100 years, no concensus on how to completely control this disease has been established. A number of very promising biological and cultural approaches have been tested. However, a real lack of understanding of the ecology of the pathogen, the nature of the host-pathogen interaction, the nature of the pathogen's virulence, and a concrete understanding of the inheritance of host resistance has impeded development of good control measures. Although many attempts have been made to control this disease with fungicides, there has been little or no success with this approach, probably because the scab organism is a bacterium and is not affected by fungicides. Some success has been reported with pentachloronitrobenzene and urea formaldehyde incorporated in soils, but control has been undependable and quite expensive. There have been very few successful chemical measures developed to control soil-borne plant pathogens. These consist mostly of soil fumigants applied at a cost of around $500 per acre and this would be prohibitive in potatoes. This position paper approaches the problem of finding a solution to scab by (1) careful examination of current control measures; (2) an in-depth examination of the soil ecology of the pathogen; (3) the physiology and molecular basis of pathogenicity, and host resistance, and (4) the genetic nature of host resistance. This is a complex and poorly understood disease. Only after a full understanding of the biology and ecology of the pathogen, the disease process, and the nature of host resistance will long-term control measures based on scientific fact be possible.

I. SCAB CONTROL RESEARCH EVALUATION PLOTS

Many cultural practices have been demonstrated to have a positive effect on reducing severity of scab on potatoes. These include: (1) Use of irrigation to keep soils wetter than 40 to 50 cb tension during the early stages of tuber formation and the time period of most rapid tuber expansion; (2) Use of acid-forming materials (e.g. elemental sulfur or ammonium sulfate) to lower pH to a range where the disease is suppressed (soil pH above 5.5 enhances disease expression); (3) Use of a green cover crop plowed down before planting potatoes to encourage build-up of bacteria antagonistic to the scab pathogen; (4) Use of ammonium rather than nitrate N sources; (5) Use of as little lime as possible in potato fields (lime encourages the disease by raising soil pH and increasing calcium levels in the soil there is a direct correlation between high Ca++ in the tuber skin and severe scab); (6) Crop rotations; (7) Use of resistant varieties.

This is a very long list of practices that can help to reduce the disease. Few, except high levels of resistance, can totally solve the problem above. A combination of most of these factors could lead to a satisfactory control measure if carried out properly.

Carefully planned and monitored research evaluation plots could provide the best means by which current information on disease control can get to the growers. With as many variables as there are in this disease, monitoring of the research plots will be crucial for success. These plots could provide valuable research data on how well these control measures work and provide an avenue to use research information generated in the following three sections. Our current research suggests that initial emphasis should be placed on evaluation of irrigation, N form, soil pH and disease resistance. Specific rotations, green cover crops, etc. could be added as part of a multi-year research program.

II. ECOLOGY OF STREPTOMYCES PATHOGENIC ON POTATO

Although potato scab has been studied for at least 100 years, very little is known about the ecology and behavior of this soil-borne pathogen. It is very important to understand the relation of Streptomyces scabies to other factors in the agroecosystem in which it exists. This will facilitate the development of more efficient control strategies that do not cause damaging changes to the ecology of the soil. Research needs to be carried out to answer such basic questions as: (1) What are the population thresholds needed to cause disease?; (2) What effects do crop rotation and crop residue have on increasing or decreasing S. Scabies populations in soil?; (3) What effects do cultural practices such as irrigation management, N form, green manures, soil pH, etc. have on the population and infection dynamics of the scab pathogen?; (4) How does irrigation and green manuring work to control the disease? Is this control the result of a build-up of bacteria antagonistic to S. Scabies? If so, what are these antagonists? (5) What effects do cultural manipulations that decrease scab have on other soil microflora (both phytopathogenic and beneficial)? (6) What role do soil borne insects play in vectoring the pathogen and/or in aggrevating scab lesion development once infection has occurred?

This is a rather ambitious list of subjects, but it reflects the real lack of understanding of the soil ecology of this pathogen. Long term control strategies depend on a better understanding of how the pathogen behaves in the soil in relation to its physical and biological environment. This research could also aid in control by identification and exploitation of antagonists of S. Scabies.

III. BIOLOGY AND PHYSIOLOGY OF THE PATHOGEN AND THE RESISTANT AND SUSCEPTIBLE HOST-PATHOGEN INTERACTIONS

Little is known about the infection process of S. Scabies on potatoes (other than some relatively rough time frames of tuber susceptibility), the physiological/biochemical response of the resistant plant to this pathogen, and why the susceptible host responds by an over proliferation of periderm (i.e. the scab lesion itself). Essentially nothing is known about what factors control pathogenicity and levels of virulence associated with the pathogen, S. Scabies. Understanding these areas will lead to a better overall understanding of why the disease develops. It will help determine where "weak links" in the pathogenesis process occur (i.e. potential "sites" to use in control strategies), and give some insight into which host genes are needed for resistance.

Specific questions need to be answered: (1) How and where does infection take place? (2) What are the physiological, anatomical and biochemical changes that occur in the resistant and susceptible host as a result of attempted infection? (3) How is resistance expressed and how, in the susceptible case, does an over proliferation of wound periderm (i.e. the scab lesion) become initiated? and (4) How is virulence of the pathogen expressed? This requires an understanding of, for example, what physiological and biochemical factors (e.g. enzymes, toxins) the pathogen uses to attack the potato tuber tissue. Understanding this aspect of pathogens could lead to chemical and/or biological control measures based on interference with the infection process and/or the normal growth and development of the pathogen. Rapid disease resistance screening methods might also be developed using this knowledge. (5) In order to fully understand the scab disease, identification of genes involved in pathogenicity is required. Essentially nothing is known about the genetic control of virulence in S. Scabies. However, recent work on other Streptomycetes has resulted in the molecular technology (i.e. transformation systems, cloning vectors) needed to carry out this work. It is necessary to know if the gene(s) for pathogenicity are in the bacterial chromosome or in a plasmid. (If it is a plasmid, rapid spread of virulence to non-pathogenic or weakly virulent Streptomycetes could occur). Knowing the genetic basis for pathogenicity could lead to the engineering of strains of Streptomycetes that could successfully outcompete the pathogen, pass on debilitating characteristics to the pathogen and/or produce antibiotics that would inhibit only the pathogen. Understanding the physiological, genetic and biochemical basis for host resistance and susceptibility, and also the genetic and biochemical basis of pathogenicity, could lead to better control of the disease via cultural, biological and chemical means based on this knowledge. This would provide information that would be very useful in understanding the genetics of resistance. This work will also be essential in the further characterization of the Streptomyces species that cause scab.

IV. PLANT BREEDING AND GENETICS IN RELATION TO SCAB CONTROL

Host-plant resistance to scab remains a necessary part of an overall long-term solution to this disease. There currently is the possibility of a faculty position for a potato geneticist which raises the potential for a major effort on the genetics of this problem. Screening for resistance to scab in numbered selections from state and federal breeding programs and evaluating named varieties used in Michigan for their relative resistance has been carried out by R. Hammerschmidt and R. W. Chase since 1982. This will be continued and expanded upon.

A major problem in breeding for resistance to scab (or for any other trait in potatoes) is a real lack of understanding of basic potato genetics. This includes inheritance of scab resistance. A number of areas need to be examined. These include: (1) Understanding the basic inheritance of scab. This would go a long way toward a rational approach for scab resistance breeding; (2) Determine how many genes are involved; (3) Since the potato is tetraploid, is there an effect on resistance based on multiple doses of the same gene?; (4) Identify and isolate the gene. This phase of the research is very important and requires a strong understanding of the host-pathogen interaction (i.e. how is resistance expressed biochemically, genetic basis of pathogenicity) as these studies (see Section III) will provide biochemical markers to look for this gene. Isolation of the genes for resistance by molecular technology could lead to enhancement of resistance in currently acceptible varieties via transformation of cells with one gene(s).

V. SUMMARY

The four areas briefly outlined here represent a unified thrust aimed at understanding the potato scab disease with the goal of disease control. Each section will provide valuable information and supportive data to each of the other three. An initial effort should be placed on section one in order to determine the current status of scab control research.

The other three areas need to be viewed as equally important research components that will support and enhance research efforts in the other two areas as well as provide new information for the research evaluation plots. Over the past 100 years of potato scab research, no really intensive research program has been established to try to solve this problem in the short and long time frames. Failure, at times, of certain control measures to work up to their potential illustrates our lack of basic knowledge about the disease and the pathogen. With changing farm practices geared toward more intensive cropping schemes and soil use, it is possible that the problem will continue to increase. At present, this is a disease that can not be solved by simple chemical treatment or other "quick" solution.

ADDENDUM 2

Mid-America Potato Co.

P.O. BOX 2604 • GRAND RAPIDS, MICHIGAN 49501 • (616) 245-2221

April 14, 1986

Michigan Potato Industry Commission
13109 Schavey Road, Suite 7
De Witt, Michigan 48820

Gentlemen:

The purpose of my letter is to encourage the Commission to promote research in the control of scab and rhizoctonia diseases in potatoes.

As you are aware, our firm has been instrumental in the promotion of the Shepody variety of potatoes in Michigan for the past several years. We believe it has tremendous potential as a french fry processing potato. Its success could open new and untapped markets for the Michigan potato industry.

The biggest drawback we have experienced so far is the Shepody's suseptibility to external damage - primarily scab. If this problem can be conquered I believe the Shepody would be an excellent variety for both processing and fresh pack.

Sincerely,

MID-AMERICA POTATO COMPANY

Walter R. Damskey

Walter R. Damskey
Vice President/Administration

WRD/jm

PROCESSORS OF QUALITY FROZEN POTATO PRODUCTS

ADDENDUM 3

Frito Lay
Frito-Lay, Inc.

April 11, 1986

Michigan Potato Industry Commission
13109 Schavey Road
Suite 7
DeWitte, Michigan 48820

Gentlemen:

Subject: Estimated Chip Potato Loss from Scab

Pitted scab is one of the major diseases of chipping potatoes. The scab lesions leave a defect on the chip which is unacceptable to the consumer.

Due to the narrow genetic base of the higher solid potatoes, which are preferred by shippers, a high percentage of the potatoes have exposure to scab. As areas continue to increase potato production and become more intensive, the exposure to scab increases. Pitted scab also damages both table and seed potatoes, making them unacceptable to market.

It is estimated that approximately 10% of chip potatoes are affected by scab on a national basis which, projected on an annual basis, is as follows:

Requirements in Cwt:	40,000,000
Percent Loss:	.10
	4,000,000
Price/Cwt:	$5.00
Estimated Annual Loss:	$20,000,000

Very truly yours,

FRITO-LAY, INC.

Harry S. Earl

Harry S. Earl
Director of Potato
Purchasing

HSE:cc

CARPENTER ROAD • PLANO, TEXAS 75024-4099 • (214) 353-3830 • P.O. BOX 660634 • DALLAS, TEXAS 75266-06

ADDENDUM 4

Ore-Ida Foods, Inc.

An Affiliate of H. J. Heinz Company

Heinz

P. O. Box 34
Greenville, Michigan 48838

Telephone (616) 754-4631
FAX 616-754-0148

April 14, 1986

TO: MICHIGAN POTATO INDUSTRY COMMISSION

Being a member of the Michigan Potato Industry Commission Processing and Research Committee, it is my duty to make recommendations to the Commission as to the needs of the potatoes-for-processing industry.

One of my great concerns at this time is the control-and biology of potato scab. Being in the processing business it is very important that we have more research done in this area.

It is very important to Ore-Ida Foods and their growers to find a solution to this problem as it is very costly to both of us. To save the potato industry in Michigan, I believe these issues must be addressed to help keep all processing industries healthy.

R. L. Smith

Richard L. Smith
Field Manager

/cjm

NICHOLAS J. MELAS
PRESIDENT

THE
METROPOLITAN SANITARY DISTRICT
OF GREATER CHICAGO
100 EAST ERIE ST., CHICAGO, ILLINOIS 60611 . . 751.5600

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April 7, 1986

Honorable Jamie L. Whitten
Chairman, Subcommittee on Agricultural,
  Rural Development and Related Agencies
2362 Rayburn HOB
Washington, DC 20515

Subject: Support for SCS Watershed Construction Program

Dear Chairman Whitten:

We were shocked and saddened to learn that the Administration's proposed budget for Fiscal Year 1987 calls for the total elimination of the Soil Conservation Service's watershed planning and operations. The Metropolitan Sanitary District of Greater Chicago (MSDGC) wishes to express its full support of the SCS Watershed Construction Program. In expressing this support, we are certain that we speak also on behalf of the many local governments, agencies and watershed steering committees in this area who have also been involved in the watershed program from its inception.

The MSDGC has been working with the SCS for the better part of the last 15 years on the development and construction of flood control structures for the various watersheds of the Chicago Metropolitan Area River Basin Plan. We have worked with the SCS in the preparation of the design, acted as the Local Sponsor responsible for land acquisition and acted as the Contracting Local Organization for the administration of many of the flood control contracts which were completed or are now under construction. We are in fact so committed to the overall program that we have, to date, spent $21,700,000 for land rights, which includes the purchase of land for projects remaining to be constructed. We want to emphasize that the projects completed or under construction have an average annual damage reduction benefit of $1,733,000, and provide flood protection to 3,666 residential units and 126 businesses. Those projects remaining to be constructed have an average annual damage reduction benefit of $9,418,000, and will provide flood protection to 6,897 residences and 224 businesses.

To: Honorable Jamie L. Whitten April 7, 1986

Re: Support for SCS Watershed
Construction Program

Great progress has been accomplished in providing flood protection to this critical urban area through the cooperative effort of the Federal-Local teamwork displayed by our two agencies. The MSDGC certainly wants this work to continue until all the flood protection measures of the entire Chicago Metropolian Area River Basin Plan are accomplished. In this regard, it is essential that the SCS Watershed Construction Program be continued for Fiscal Year 1987.

Very truly yours,

Nicholas J. Melas
President

NJM:FED:LRD:ah

American Association of Nurserymen, Inc.
1250 I Street, N.W., Suite 500, Washington, D.C. 20005 (202) 789-2900

Statement of the
American Association of Nurserymen
before the
Subcommittee on
Agricultural, Rural Development
and Related Agencies
Committee on Appropriations
U. S. House of Representatives
April 15, 1986

The American Association of Nurserymen welcomes this opportunity to present nursery industry views regarding FY87 appropriations for the Department of Agriculture.

The American Association of Nurserymen (AAN) is the national trade organization of the nursery, landscape and garden center industries. AAN represents more than 3,500 firms engaged in all aspects of the nursery industry -- including the grower, wholesale and retail segments. By almost any standard, our members are primarily small family-owned farming businesses.

The nursery industry is one of many diverse elements of the American agricultural community. The demand for nursery products and the number of people employed in the nursery industry is growing perhaps more than any other agricultural sector. Nursery production and marketing includes, but is not limited to the following:

A. Fruit and nut trees, berry plants and grapevines used by commercial growers and home gardeners.

B. Trees, shrubs, vines and groundcover plants used for landscape and environmental improvement.

C. Seedlings for production of Christmas trees and the reforestation of private woodlands.

D. Trees and other plants for windbreak and soil conservation plantings.

While some nursery firms specialize in producing plants, others specialize in landscaping, retail garden center operations, or mailorder businesses. Many firms combine two or more of these activities Landscape, garden center and mailorder firms may produce a portion of the plants they sell, while the remainder are bought from production nurseries. Nursery plants are living organisms requiring care and protection from their beginnings in the production nurseries and continuing throughout the market channel.

A Family of Associations: Garden Centers of America, Horticultural Research Institute and its Endowment Fund, National Association of Plant Patent Owners, National Landscape Association and Wholesale Nursery Growers of America.

Relative to all other branches of agriculture, the nursery industry indeed is the most visible. Products of the nursery segment of agriculture can be seen everywhere -- on city streets, in yards, around buildings and inside homes and offices.

We also wish to emphasize that nursery products are a significant part of overall horticultural production which is estimated to have a farm value of more than $16 billion. In fact, horticultural crops are the fourth largest agricultural commodity. In 1985, the nursery industry produced plants with an estimated wholesale value of $2 billion.

One of the major uses of nursery farming products is the protection, preservation and improvement of the quality of our environment. Trees and other landscape plants help prevent soil erosion. They can be used as windbreaks, to block unwanted sights and sounds, to remove pollutants from the air, and to conserve energy. Coupled with the satisfaction and added value derived from a well-landscaped residence or business, these functional uses of plants have substantially increased the demand for the products and services of the nursery trade over the last 15 years.

In view of the increasing demand for nursery products, and to ensure such will continue to be available for improving the quality of our environment and saving our valuable natural resources (such as soil, clean air, and energy,) the American Association of Nurserymen (AAN) has annually submitted testimony highlighting important areas of research which requires the immediate and serious attention of this committee and Congress as a whole.

At the same time, however, as small business owners, we are committed to a significant reduction in the federal deficit. Our members understand all too well what the deficit can do to our economy. We believe deficit reduction can best be achieved by an across-the-board freeze on all programs. By the same token, however, AAN cannot and will not support the wholesale elimination of modest, yet vital programs simply because they represent dollar amounts easily "rounded out" of existence. By nearly any measure, our country accrues more for its dollar from these modest and highly effective programs than from some of the "big ticket" budget items.

Traditionally, the nursery industry has never looked to the government for handouts, and today is no exception. The nursery industry is prepared to make the necessary sacrifices to help achieve our country's economic goals. As a result, we have painstakingly crafted our requests and recommendations herein to balance our desire for immediate cuts in the deficit with the critical need to maintain the integrity of programs absolutely vital to the nursery industry.

MINOR USE PESTICIDE PROGRAM

The American Association of Nurserymen strongly opposes the proposed total elimination of the special grant funds for Pesticide Clearance and Pesticide Impact Assessment. Due to the high cost of pesticide registration, many producers of so-called minor use crops, such as those produced in nurseries, frequently find themselves without adequate pesticides to meet quarantine requirements or market demand for high quality plants. Chemical companies are reluctant to spend large sums of money necessary to obtain registrations for pesticides to be used on nursery and other minor use crops since they do not have large volume potential such as wheat and corn.

Inter-Regional Project #4 (IR-4)

For the past eight years, this Cooperative State Research Service special research grant program of pesticide clearance has greatly assisted in obtaining more prompt pesticide registrations for nursery crops when such pesticides are already registered for use on food or feed crops. Cancellation of the IR-4 program, which costs approximately $1.4 million per year, will make it necessary for nurserymen and florists to wait six to ten years for needed pesticide registrations -- if they are granted at all.

We strongly urge the Congress to provide the necessary $1.4 million to maintain the IR-4 pesticide clearance program. We also request $2 million for the National Agricultural Pesticide Impact Assessment program. This request is made with the understanding that a fair share of the funding is used for "ornamental" pesticide uses.

AGRICULTURAL RESEARCH SERVICE

We wish to thank Congress for its continued and increasing support of the programs of the Agricultural Research Service. Likewise, as evidenced by continued ARS budget increases, we thank the Administration for its recognition of the importance of agricultural research in general, as well as research on plant productivity. The American Association of Nurserymen is supportive of ARS as a whole, particularly its research programs on plant productivity affecting horticultural crops, including those produced by the nursery farming community.

We wish to emphasize the need for an integrated, interdisciplinary approach in support of research involving products of the nursery trade -- plants which improve and enhance the quality of man's environment. Likewise, this research should include the important area of water management. We believe ARS needs to strengthen and reinforce existing nursery crops research programs, but not at the expense of traditional research positions. AAN urges that $450,000 be allocated within the proposed ARS Plant Productivity Budget to assure that the nursery crops research programs are so strengthened and reinforced.

U. S. National Arboretum

We wish to thank the Congress for its recognition of the U. S. National Arboretum as a national center of excellence in education and research concerning environmental plants. The additional appropriation of $500,000 in 1985 assures that program advances made in recent years will not be lost.

However, we feel that we must emphasize to the Agricultural Research Service that they recognize the need for continued nursery crops research at the U. S. National Arboretum. As such, AAN concurs with the recommendation of the U.S. National Arboretum Advisory Council for the establishment of a germ plasm repository for environmental plants. We urge the Congress to allocate $200,000 for the establishment of this clonal repository.

We strongly support movement of that portion of the Arboretum Herbarium that does not directly relate to activities at the Arboretum. Moving these materials in combination with installation of compactors for the materials remaining will free up valuable space that can be used as research offices and laboratories -- two seriously lacking facilities currently.

Florist and Nursery Crops Laboratory, Beltsville, MD

As you are aware, as technological advancements are made, there is a continuing need for improving and upgrading research facilities, including renovation and modernization of greenhouses. AAN supports the necessary funding for the improvement of ARS research facilities in general, and specifically the greenhouses occupied by the Florists and Nursery Crops Laboratory at Beltsville, Maryland.

These greenhouses were built more than 40 years ago and have since never been modified or updated. In addition, they have not been adequately maintained due to a lack of funds. As a result, many are in very poor condition with excessive air infiltration, heating systems unable to maintain acceptable temperatures, and cooling systems incapable of maintaining temperatures at a reasonable level during the summer. In addition, the present design makes it difficult to isolate different types of research and, the physical isolation required to conduct controlled experiments on pests and diseases is simply impossible. We thus urge the Congress to appropriate $1 million for renovation of some of the existing greenhouses, including those currently occupied by the Florists and Nursery Crops Laboratory.

ANIMAL AND PLANT HEALTH INSPECTION SERVICE (APHIS)

Gypsy Moth

Nursery plants are often regulated to protect other agricultural crops,(as well as forest and landscape plants about our homes, offices, parks and along our highways) from pests that are not serious pests of nursery crops. Gypsy moth is such a pest. Three years ago the American Association of Nurserymen endorsed a modification in the gypsy moth quarantine which placed the movement of outdoor household furniture from regulated gypsy moth areas under regulations. As gypsy moth continues to spread into heretofore uninfested states, it is important that APHIS play a very strong role in preventing such spread. APHIS must continue its leadership role with the State Departments of Agricultue of those fortunate states which have not had to contend with this ravenous pest. There is a continuing need for APHIS to be involved in gypsy moth quarantine activities and to serve as an arbitrator in working out regulations between infested and noninfested states.

We support the increased funding for APHIS gypsy moth programs and closer monitoring of outdoor household furniture as it is moved throughout the country. Compliance with this program has apparently improved during 1986, but to be effective in preventing the spread of gypsy moth, monitoring must be strengthened and more training programs for inspectors must be developed.

Japanese Beetle

While there are no funds designated for the Japanese beetle quarantine under the proposed FY87 budget for APHIS (just as there were none in 1985 and 1986), there remains a limited, yet significant, role for APHIS in coordinating information regarding the natural spread of the pest. APHIS also has the responsibility to certify nursery crops free of Japanese beetle in order to meet quarantine requirements for Canada, the principal foreign market for U.S. nursery plants. However, since the 1979 cancellation of chlordane for nursery uses a pesticide has not been available during the production cycle to enable nurserymen to meet Canadian requirements. ARS has conducted considerable research to find a suitable replacement. But until a replacement pesticide is approved, American nurserymen are forced to resort to using expensive pesticides applied to individual plants in an impractical manner. This is not without serious applicator and environmental hazards.

AAN urges APHIS to continue negotiations with Agriculture Canada to modify the Japanese beetle quarantine and to insure continued shipments of nursery stock to Canada. A multi-million dollar market is rapidly being lost since American nurserymen are unable to ship plants to Canada under existing quarantines. AAN also urges ARS to continue pesticide tests on both field and container grown nursery crops with a continued commitment to finding pesticides to enable nursery farmers to meet quarantine requirements for Japanese beetle and other pests on shipments to Canada.

Imported Fire Ant

Due to Imported Fire Ant Quarantine Regulations in the South, some nurserymen cannot ship their plants outside infested areas. AAN urges that the Imported Fire Ant Program be continued at funding levels orginally proposed by APHIS for FY86. AAN believes that total elimination of the program will create a problem situation much like that with Japanese beetle. AAN also urges APHIS to include nursery uses in the improved control and regulatory techniques program for Imported Fire Ant.

Witchweed

Witchweed is still another imported pest which, while not a pest of nursery crops, would be a devastating pest to the nation's corn crops if it were to spread by some means from the limited infested areas in North and South Carolina to the major corn producing areas. Close cooperation of North and South Carolina with APHIS has not only limited the spread of this pest naturally, but has permitted eradication from limited portions of the area once infested. Since corn is a major agricultural crop, and is also one of our major export crops, this quarantine is vital to the entire country and should not become the sole responsibility of North and South Carolina. We therefore believe that this budget item should not be eliminated, but should be maintained at FY86 funding levels.

Agricultural Inspection

It is the objective of APHIS to protect the nation's animal and plant resources from artificial introduction and spread of hazardous insects and diseases. Therefore, Congress, the Administration and citizens of the United States should look upon the role of APHIS as preventative in purpose. APHIS has been successful in preventing the artificial introduction of many of the world's most destructive plant insects and diseases. Despite tight budgets, APHIS continues to be very innovative in either eradicating those few new introductions of plant pests or successfully retarding the spread of new pests until acceptable means of controlling them economically have been determined. The American Association of Nurserymen fears we are fast approaching (if we have not already reached) the reduced budget level whereby further innovative efforts will be detered.

The AAN commends APHIS for its innovative efforts to maintain and improve its effectiveness in preventing the introduction of foreign animal and plant health pests not now in the United States. Foreign arrival-baggage and port-of-entry inspections continue to be important warranties against accidental introduction of foreign agricultural pests. Although AAN supports overall federal budget reductions in the interest of protecting American agriculture, we also strongly endorse APHIS' proposed budget for agricultural quarantine inspection. In recent years, outbreaks of Medfly, Oriental fruit fly and citrus canker confirm that increased funding is necessary to continually prevent harmful pests from entering the United States. Furthermore, as fewer and fewer pesticides become available for quarantine purposes, it is even more vital that APHIS' role be maintained.

COOPERATIVE STATE RESEARCH SERVICE

The State Agricultural Experiment Station system performs nearly 60% of agricultural research in the United States. This successful system is the result of a balanced blending of local, state and federal interests, personnel, funding, program development and administration. It continues to be most effective. As mentioned in the introduction, the AAN supports an across-the-board freeze on all programs -- Hatch Act formula funds are not an exception. As always, we also urge directors of the State Agricultural Experiment Station to fairly fund research classified as "Research Program 3:15 Plants to Enhance the Environment."

EXTENSION SERVICE

The private Nursery Marketing Council (NMC) supplies the nursery industry with professional advertising and public relations activities to increase the sale of plants and related products and services. When NMC recently sponsored exhaustive research and asked consumers all across North America where they turn for accurate information about our products, the two most trusted sources, (by a considerable margin) were retail nursery firms and County Extension Agents. These extension agents are a logical point of dependability for those seeking information about a fairly complicated product, and we, the nursery industry, are fortunate they are there.

More and more extension agents across the country find themselves in or surrounded by urban areas where one of the main agricultural problems facing people is no longer the growing of commercial crops, but rather the care and feeding of trees, plants and shrubs. In fact, this is precisely why AAN has been attempting for many years to convince the Department of Agriculture that its most public product is grown by the nursery farming community.

The extension agent, who means so much to the nursery industry, is a county employee whose cost is shared with the state government and the United States Department of Agriculture. The nursery industry has never lined up for price supports or any of the other programs which have assisted some segments of agriculture over the years, but we do need help in research and relating our product to the consumer. There is no better asset to assist with the latter than the county extension agent. It is for these reasons that AAN opposes the Administration's FY87 budget to reduce the Smith-Lever (3b and 3c) portion of the Extension Service.

AAN also disagrees with the proposal to eliminate totally all Smith-Lever Act 3(d) programs, especially those dealing with Pest Management and Pesticide Impact Assessment. Since chemicals remain an important agricultural pest suppression tool, continued evaluation of materials used for this purpose is essential to the protection of America's agricultural products. Funds for this purpose are also critical to the ability of Extension Service Agents to alert nursery farmers and others as to the correct timing for application of pesticides in order to maximize their effectiveness of suppression. AAN urges Congress to fund, at least at the FY86 level, the Smith-Lever portion of the Extension Service budget as well as the two important programs mentioned above.

We believe that the federal government's contribution to research is a reasonable expenditure of federal funds, particularly since nursery farmers neither ask for, nor receive, crop subsidies or other federal support. AAN urges Congress to provide the critical funding as outlined herein. Once again, we thank you, Mr. Chairman, for this opportunity to present the views of the nursery industry with respect to agricultural research.

STATEMENT OF HERB EDMONDS

NATIONAL PRESIDENT

NATIONAL ASSOCIATION OF FARMER ELECTED COMMITTEEMEN

Presented to the

SUBCOMMITTEE ON AGRICULTURE, RURAL DEVELOPMENT,

AND RELATED AGENCIES

Jamie L. Whitten, Chairman
1986

PREPARED STATEMENT OF HERB EDMONDS

NATIONAL PRESIDENT

NATIONAL ASSOCIATION OF FARMER ELECTED COMMITTEEMEN

Mr. Chairman, members of the Subcommittee on Agriculture, Rural Development, and related Agencies:

I am Herbert Edmonds, President of the National Association of Farmer Elected Committeemen, our membership is made up of locally elected ASCS Committeemen and friends.

The county committee administers farm programs at the local level. As such, we are in a unique position of judging the relative merits of farm programs. As individual farmers, we participate in the programs on our own farms. As Committeemen we see first hand the accomplishments of farm programs, and if these programs are weak, we are in the best position to assist in correcting them.

At the present time, our Federal Government is making a determined effort to decentralize more and more of the responsibility for the administration and funding of many of its programs.

Our Association recognizes the acceptability of the decentralization of government and believes there are areas of need that are best served by local governmental units, such as the administration of our public schools, libraries, and fire protection units.

On the other hand, from the standpoint of accomplishment and economy, there are some areas of governmental responsibilities that are better served if administered at the Federal level. Examples of these are: Soil and Water Conservation, Price Support Programs and Self-funded Disaster Programs. Soil and Water Conservation is one of the most pressing needs of our nation. Our nation's farmers and ranchers have lived on the land for generations and have seen first-hand the effect of good, as well as bad, conservation of these resources. In more recent years, this awareness has been shared by an increasing number of urban dwellers. With an ever increasing world population, and a daily shrinking amount of tillable land available for production, it is easy to understand the common concern of our citizentry as it ponders the food supply of the future, asking the question: Will we abuse the land and the stewards of the soil to the point that our government will be forced to buy grain from overseas instead of selling?

It would be easy for our Federal government to pass their concern to our individual states and charge them with the responsibility of alleviating the problem. However, 50 states working independently with 50 different programs would not give us the continuity of purpose, or the overall coordination of effort that is required for such an important undertaking. Nor does any state have the financial ability under present conditions for this increased burden that would be placed on their budgets.

Soil and Water Conservation can be more efficiently coordinated from the Federal level, annually considering programs for unity of purpose and continuity of direction. In this regard, our Association would strongly urge this Subcommittee to restore the funding of the Agricultural Conservation Program, commonly called ACP, to a minimum of $ 500 million. This program, which cost-shares Soil and Water Conservation practices with the nation's farmers, has through the years, established an enviable record of accomplishments. Today's farmer is at best a temporary steward of the farm he owns and operates. He hopes to place permanent, long lasting, Soil and Water Conservation practices on his farm, but he is not able to do so because of the cost involved. A Federal cost-share program is justified, as it is a joint long term investment with the farmer, not only on the farm involved, but for the land above and below the conservation practice.

The area involved then becomes an improvement to the general community, including municipalities and urban developments, ponds, lakes, streams and rivers. The ultimate benefactors are the generations of yet unborn babies, who will have ample food and clean water supplies, as a result of the foresight and planning of this government and this generation.

Some have criticized the ASCS Administered Agricultural Conservation Program in recent years, because it was inadequate to address the increased needs of Soil and Water Conservation. My answer to this criticism is simple -- the funding of the program has not been sufficient to meet our needs. $ 500 million was authorized in the original "Soil Conservation and Domestic Allotment Act" of 1936 for the program. Economists tell me that $ 500 million in 1936 would be equal to $ 30 billion today. Our ACP program has been allowed to deteriorate to a funding of only $ 190 million in recent years. I am here today asking for the $ 500 million authorized, from which we could fund both ACP and long term land retirement programs. ACP has been successful, in part due to the technical advice provided by SCS and we strongly urge their continued support, however, we would encourage the continued streamlining of the administrative part of SCS. It seems only 31% [1] of the field office time is being reflected in direct applicaitons, that is at least 30 - 40% low. One can only conclude that entirely too much time is spent in "support activities" and "appraisals" in addition to the necessary planning and administrative functions. We would recommend that ASCS computers be utilized in the gathering and processing of SCS data. The administrative machinery is already in place and has an enviable record and should be allowed to perform.

Much time and effort has been spent selling Congress and the farmer on Long Term Agreements (LTA's). This program leaves the impression that a 5 - 10 year Farm plan, with guaranteed funding from ACP funds is the answer to everyone's problems. The practical facts do not support this plan. To be realistic farmers cannot predict their economic position that far in advance, thus necessitating frequent annual revisions of the plan or cancelling it completely. The major benefactor of this plan is the SCS work load count as reflected in the low 31% [1] direct application of SCS field office time. Non-binding farm plans are beneficial as they identify critical areas on the land and prioritize the needed practices for attention as quickly as funds become available.

Those farmers involved with the Committee System, who are elected by their peers, comprise the County and Community Committees and are in the best position to determine the practices and the proper cost-share rates for any Soil and Water Conservation Program. In short, they are the best investment for the minimum cost of any government expenditure in the United States Department of Agriculture.

NAFEC believes the Farmers of this Nation would be better served if the Farmer Elected Committee system also administered:

1. Farmers Home Administration Loan Program.

The farmers of this nation have proved, with their support, the integrity of the ASCS Committee system as it administered rapidly changing Farm Programs for the past fifty years, and would welcome that integrity in FmHA's administrative chain of responsibility.

2. Federal Crop Insurance Corporation.

The All Risk Insurance, though born with good intentions of helping the farmer by replacing the Disaster Program, has been something less that a success. The ability to relate to the farmer and his needs have been lacking, with only minor moves to correct the problems. The Commercial Insurance Companies, not the farmers, are the ones who have benefited financially in recent years, frequently receiving several times more in premiums, management fees, etc. than the Federal premium subsidy, thus defeating the purpose of the original intent of Congress. The amount of money the corporation has borrowed in recent years has nearly doubled annaully and now has a deficit nearly 50% [2] greater than at the end of FY'85 and is showing a loss ratio of 1.46 to 1. Private insurance sources have for years only wanted to sell "fire, wind and hail" not the multi-peril group that is totally actuarialy unsound. Some of the problems have been compounded by the lack of realistic yield and acreage reports, quality control and lack of understanding of Governmental procedures by the private sales persons.

NAFEC feels confident of the ASCS Committee Systems ability to administer all of the programs and we know the County Offices have ther performance record to deliver the product to the farmer.

We are confident a "Self Help Disaster Plan" can be devised, and funded by Congress with an intial grant to a revolving fund. A plan with premiums low enough that all farmers can participate, a plan whose yields and acreages are determined by the Farmer Elected Committee system on a county by county basis, a plan that farmers can buy in ASCS office at the time they sign-up for the farm programs, one that gives broad equitable coverage and is administered entirely by ASCS. A plan developed along these guidelines could allow the private sector to sell "Fire, Wind, and Hail" competitively.

Price Support Programs are another area of economical administration of programs at the Federal level. The current economic crisis in agriculture is an indication of the need for continued Federal involvment in production adjustment and Price Support programs; but even more importantly, concerned and aggressive action must be taken to increase exports. This problem can be helped at the state level, but an individual state would be nearly powerless to act if there was not overall supervision of direction and effort on the part of the Federal government.

ASCS Committee system Administered Price Support programs are self-supporting. Farmers pledge their individual commodities to the Commodity Credit corporation in exchange for Price support loans. These loans are dispersed by the county ASCS Office, and are repaid in full, with interest, equal to the total cost of money to the Federal Treasury. ASCS Offices also make loans for the construction of farm storage facilities, along with drying and related equipment. These loans are likewise repaid by the farmer, in full, with interest, at at rate equal to the total cost to the Federal government, thus both of these programs are self-supporting and should be expanded. At present, the Farm-Stored Facility Loan Program has be discontinued. If the Grain Reserve Program is to fully operate, as intended, it will be necessary to build additional storage facilities. If the U.S. farmer, who has recently signed his intention to participate in the acreage reduction program is to proceed with that compliance, it is of prime importance that the Farm-Stored Facility Loan Program be made available once again as soon as possible, so that our farmers can make their 1986 cropping, harvesting and storage plans accordingly.

Thank for for this privilege of testifying, and if there are any questions at this time I will attempt to answer them.

SOURCES:

[1] Evaluation of Conservation Technical Assistance - Part I National Survey

[2] Budget FY 1987

STATEMENT OF
DR. STANLEY O. IKENBERRY
PRESIDENT
UNIVERSITY OF ILLINOIS

SUBCOMMITTEE AGRICULTURE,
RURAL DEVELOPMENT AND RELATED AGENCIES

COMMITTEE ON APPROPRIATIONS

UNITED STATES HOUSE OF REPRESENTATIVES

APRIL 15, 1986

STATEMENT OF DR. STANLEY O. IKENBERRY
PRESIDENT, UNIVERSITY OF ILLINOIS

Mr. Chairman and members of the Committee, thank you for the opportunity to present a progress report on planning for the new Plant and Animal Sciences Research Center at the University of Illinois at Urbana-Champaign. We are deeply grateful to you for your leadership in providing nearly $3 million in FY86 to plan the facility. Your foresight initiated a schedule which now calls for the facility to be ready for construction to begin in the late summer or early fall of 1987. Thus, approval of the remaining $27 million for construction and completion will be needed in FY87 if this economically important center is to remain on schedule.

The Plant and Animal Science Research Center, when completed, will provide at least 100,00 assignable square feet of space for agricultural biotechnology research. It will house at least 40 well-funded, productive research programs and unique support facilities. In the immediate vicinity of the proposed location for this structure are strong, traditional plant and animal sciences research and educational programs, outstanding greenhouse facilities, libraries, computer centers, corn and soybean germplasm repository, and field and farm research facilities. The Center will provide a unique setting for many bold research and development initiatives supported by the state and federal government and the private sector.

Among the important biotechnology related research efforts that will be mounted in the new facility are programs in corn and soybean germplasm enhancement, biological control of pests, molecular genetics of plants and animals, plant and animal cell and tissue culture, and molecular genetics and genetic engineering of microorganisms for new and unique fermentation processes and other applications. These efforts will be mounted by teams composed of scientists studying the physical, chemical and biological mechanisms by which desired traits or conditions are expressed in whole organisms, identifying and characterizing the nuclear or extranuclear genes that encode desired traits, and transferring the desired genes and associated genetic regulatory mechanisms into new host individuals with other desirable characteristics and with genetic backgrounds in which the new characteristics can be optimally expressed. Other scientists will focus on the molecular biology and genetics aspects of developing new products and procedures for disease prevention and control in pest management.

The ultimate objective of these studies is to make agricultural plants and animals more resistant to pests and stress, more efficient and productive, and more useful. New, more efficient procedures for changing the chemical and physical characteristics of agricultural products will open up new, nontraditional uses of these products, including use for energy and chemical feedstocks, and will expand and improve traditional uses.

The research efforts conducted in the Plant and Animal Sciences Research Center, coupled with strong traditional agricultural applied research and extension programs conduction in the Midwest will assure that American farmers are the early adopters of new technology. This will give them the competitive edge in the highly competitive global agriculture of the future. Because biotechnology research makes genetic improvement of plants and animals more rapid and efficient, and provides a great number of biological products to help protect plants and animals from diseases and stress, it should contribute greatly to the overall efficiency of agriculture. The products of biotechnology research, including new crop varieties, animal lines, and agricultural pharmaceuticals, can be purchased in or large quantities, thus the research is basically scale neutral and should benefit small and medium-sized farmers as much or more than it does large-scale farmers. Since the businesses that supply these inputs to farmers are extremely competitive, the savings achieved by more efficient procedures will be passed on to the farmers and ultimately to the consumers of agricultural products.

The original appropriation for the Plant and Animal Sciences Research Center directed the United States Department of Agriculture-Agricultural Research Service to construct the facility on the University of Illinois campus and anticipated that the University would operate and maintain the facility at no additional cost to the federal government. This plan was reprogrammed by USDA so that the approximately $3.0 million in planning funds, will come to the University of Illinois in the form of a grant from USDA-Cooperative States Research Service. The University of Illinois will work closely with USDA-CSRS personnel on the project to assure that it meets federal, state, and institutional needs. USDA-CSRS have identified Dr. Clare Harris, Deputy Administrator, and the University of Illinois has identified Don Holt, Associate Dean of the College of Agriculture and Director of the Illinois Agricultural Experiment Station, as liaison persons relative to this project. They are in the process of working out a payment plan such that the planning monies will come to the University of Illinois as various tasks are accomplished. As of today, our University staff have nearly completed a detailed list of specific space and programmatic needs which will guide the architects in actual design.

Since the Plant and Animal Sciences Research Center is a major facility, the University of Illinois is also updating its entire Urbana campus plan to accommodate the structure. Major utilities will be rerouted and upgraded. Some existing structures and facilities will be removed and appropriate connections to other structure in the vicinity will be established. A number of state-funded construction projects on the agricultural campus have objectives that are related to those of the Plant and Animal Sciences Research Center. The overall program is being planned to maximize efficient use of the entire complex of new and existing structures housing agricultural biotechnology research and related efforts. The net result will be the finest physical facilities for agricultural biotechnology research in the world which can contribute significantly to the international competitiveness of American agricultural products.

The State of Illinois has committed more than $75 million to the construction of this advanced research complex, will allocate $3 million to equip the new Center, and will devote almost $2 million annually to operate it. We thank the Committee for providing federal participation in this unique and important venture. We ask that you help us avoid delay in our progress by approving $27 million in construction funds in FY87.

Testimony of the

UNITED STATES TELEPHONE ASSOCIATION

submitted to the

AGRICULTURE, RURAL DEVELOPMENT AND RELATED AGENCIES
SUBCOMMITTEE ON APPROPRIATIONS OF THE
U.S. HOUSE OF REPRESENTATIVES

April 15, 1986

To be added to the Committee's record.

Opening Remarks

The United States Telephone Association (USTA) is the nation's largest exchange carrier trade group, representing 1100 member companies, including the Bell operating companies. Together, USTA members provide over 99% of all access lines in the U.S. Diversity is a trademark of the industry. Firms range from publicly-held corporations listed on the New York Stock Exchange to family-owned companies or companies owned by their customers. Non-Bell systems serve 59 percent of the nation's "telephone territory" and the Bell companies serve the rest.

The nation's local telephone companies are dedicated to two things - serving the nations telecommunications needs and maintaining universal service. USTA members, large and small, firmly believe that in order to maintain a healthy and growing rural telephone industry, that provides universal telephone service, the targeted assistance offered by a strong and viable Rural Electrification Administration (REA) is needed.

Recommendations

The United States Telephone Association (USTA) recommends the following for the REA Telephone Program:

- The continuation of a strong REA Program and Universal Service.
- Financing:
  a. a freeze of FY 1986 lending levels; 250 million for insured loans, 185 million for the Rural Telephone Bank and 125 million for loan Guarantees.
  b. $30 million capitalization in FY 1987 for the Rural Telephone Bank
  c. no rescission of $30 million capitalization in FY 1986 for the Rural Telephone Bank
- The continuation of the current range of interest rates.

- Freezing the REA administrative budget at the 1986 levels of approximately $30 million per year.
- Congressional direction for REA to continue reduced regulation of general funds.

As in the past, we understand the requirements of the Gramm-Rudman Act for proportionate reductions in program levels to achieve overall budget objectives. However, the Administration's fiscal year 1987 proposals are nothing of the sort. They are a calculated attempt to phase out the REA program entirely, contrary to last year's three year budget agreement.

Need for Financing

Utilities as an industry are capital intensive, and rural telephony is no exception. All utilities need to invest relatively large sums of capital to extend their service, modernize plant and provide new services. Rural utilities generally have higher costs and need relatively greater sums of capital to maintain universal service. The following chart shows the growth of REA Telephone Borrowers during the last 10 years:

	1984	1974	Growth
Total Telephone Plant	10,194,739,000	3,577,073,529	185%
REA Long Term Debt	4,545,020,000	2,193,389,241	107%
Total Subscribers	4,960,960	3,154,426	57%
One Party Subscribers	4,081,783	1,869,888	118%
Route Miles of Line	868,333	648,492	34%
Employees	28,743	20,837	38%

Even with this tremendous growth in rural telephony that has been financed with REA aid during this period, rural switching offices have generally not been modernized. The following shows the status of REA borrower switching offices:

Total number REA borrower switching central offices	5825
Switching offices that are digital	1134
Capital needed per year to replace these offices during the next ten years	$153,587,000

The vast majority of REA borrowers' switching offices still has the mechanical step-by-step technology. X-BAR and analog technologies generally have not been used to upgrade these offices. To provide new services that urban customers will have and to continue the present level of telephone service, new switching offices will be needed. Maintenance of the old step-by-step offices is getting more expensive and parts are getting scarce.

In the last 10 to 15 years, REA borrowers have upgraded to mostly one party service. The bulk of the investment to accomplish this has been in buried cable, aerial cable and other equipment to provide the prevailing quality of voice grade service. The service life of this equipment varies, but experience demonstrates that a 15 year service life is not uncommon. The following shows the potential yearly capital need for replacing this plant.

REA Investment in Outside Plant	$4,694,124,000
Annual Capital Requirements to Replace over 15 years	312,942,000

Given the need to update switching centers and the requirement to begin replacing outside plant, the 1986 authorized lending levels for REA are essential for rural areas and universal service. The job in rural areas is not done.

Problems with Market Financing

REA borrowers in general have four basic problems with obtaining financing from private markets:

- Small Size - Most borrowers have fewer than 2000 subscribers.
- High Debt Ratio - The average debt for REA borrowers is approximately 75% of total financing. Private financial institutions many times require more equity before making a loan on any terms.
- Comparatively Lower Earnings - As an example, the market usually require a two times interest coverage test for public utilities; many small telephone borrowers cannot even meet the low Rural Telephone Bank requirement of 1.5 times.
- REA Mandatory First Mortgage - Any other outside financing would have to take a second position unless REA accommodates its first lien. At this time, for telephone borrowers there is little published policy on lien accommodations. REA's case by case approach is very burdensome to many or most private lenders.

It is questionable whether the commercial market would provide capital for the average REA borrower. The problems of attracting commercial capital would be especially severe for the hundreds of small, rural telephone companies currently borrowing from the REA. Commercial capital markets probably would reject the demands of many companies which today provide telephone services to millions of rural people.

Need for Low Interest Rates

The REA Program has a range of interest rates to fit the varying needs of Rural America. The present REA telephone loan programs reflect careful targeting of federal expenditures. In 1981, Congress limited the availability of 2-percent loans to cases of "extreme financial hardship", or cases when a 5-percent loan would cause rates to be substantially higher than the rates charged for similar service in the same or nearby areas by other telephone companies. In recent years, the "financial hardship" authority has not been used and all new insured loans have been at the 5% rate.

The Rural Telephone Bank (RTB) was established in 1971 and its current interest rate is 8.0%. The whole thrust of establishing the Rural Telephone Bank was to wean borrowers away from traditional REA financing as they gained financial maturity and were able to pay a higher rate of interest. This concept was not hastily conceived. It represented long study and thought on the part of the Department of Agriculture, the Rural Electrification Administration, REA borrowers and their associations.

Guaranteed loans can also be obtained from REA, with interest rates higher than the RTB.

The dramatic drop in interest rates over the past year has decreased the cost of the REA program by reducing the gap between REA's cost of borrowing and its lending rates. REA lending rates are nearer the market, but their level and availability are the key to rural telephone systems' provision of telephone service on an area coverage basis at reasonable rates.

Despite the accomplishments of REA, the need for low-interest and guaranteed telephone loans through the various telephone loan programs continues.

The Administration's proposed FY 1987 raises the interest rates on all REA loans to market rates plus 1-1/8%. In addition, loan origination fees would be assessed. The resulting rates would have a devastating effect upon small rural telephone companies.

The REA Telephone Loan Program does not significantly contribute to the deficit problem.

The following comparison of money paid to the Federal Government by REA telephone borrowers to the costs to the government of maintaining the REA illustrates the fact that REA telephone borrowers do not contribute to the Federal deficit in any significant way. As a matter of fact, the telephone program produces a net gain of over $10,000,000.

Funds flowing from Telephone Borrowers to the Federal Government in 1984 (Thousands)	
Principal Payments	$126,379
Interest Payments	236,541
Federal Income Taxes	184,217
Other Federal Taxes	38,272
	$585,409

Authorized Telephone Loan Program in 1984 and half of REA's administrative costs (Thousands)	
Insured	$250,000
Rural Telephone Bank	185,000
Guarantees	125,000
1/2 REA Administrative Expenses	15,000
	$575,000

Telephone service in rural areas is an essential part of the rural infrastructure that keeps American agriculture productive. The return that is delivered to the economy in terms of increased agricultural production and reduced balance of trade problems has to be worth more than the cost of REA telephone program. Furthermore, the economic stimulus of the loans results in additional tax revenues to the federal government, making REA Telephone Loan Programs net contributors to the federal treasury. At this period of crisis in American agriculture, it is not the time to reduce the level of investment in rural areas. Employees of REA borrower companies and the investment of the REA in rural areas contribute significantly to the farm economy.

Over $1 billion in principal payments already has been repaid to REA. There has never been a default in the 34 year history of the REA telephone program. Truly, this is a record of which, as taxpayers, we can all be proud.

REA Telephone Remains a Rural Program

The average REA telephone borrower has a density of only 5.5 customers per mile of telephone line. That number was 4.9 in 1974. If one looks at density on the basis of customers per square mile, it is only 3.8 -- surely indicative of low density, with higher inherent cost.

REA Standards Division

Last year the Committee affirmed its support for REA standards by including report language advising the filling of vacancies in the Standards Division. Yet, this year the problem is worse - almost one-third of the authorized positions in the Division are vacant.

REA standards are viewed by the industry as a benefit. Without an effective standards function, small companies and cooperatives would be particularly disadvantaged. While larger companies have more in-house engineering expertise, smaller systems need REA assistance now more than before because of rapidly changing technology and increasing competition.

REA estimates that it takes eight professional man-years to maintain telephone standards. We consider this extremely cost effective. In addition, REA Standards have substantially strengthened REA loan security.

REA standards are a part of a rural engineering philosophy developed by REA over the years. The Industry believes that the logical place for rural standards is at REA and that adequate personnel should be assigned to this function.

General Funds

Last year, by voiding REA's restrictive general funds policy, you took a step which helped REA begin to make loans up to its authorized floors and more properly carry out the goals of its Act. However, without additional action, the restrictive general funds policy would return on October first of this year. The general funds policy should be voided again this year.

STATEMENT

by

Bernard Megard, President
Contact Lens Manufacturers Association

to the

Subcommittee on Agriculture, Rural Development,
and Related Agencies

United States House of Representatives

May 2, 1986

The Contact Lens Manufacturers Association (CLMA) appreciates the opportunity to present these views to the Subcommittee. CLMA is a trade association representing approximately 170 manufacturers. The active members of the association are engaged in the manufacture of contact lenses. Associate members are manufacturers of related products, such as lens blanks and optical lathes. Our membership is principally composed of small to medium-size manufacturers, although large corporations are also represented.

Our association is dedicated to maintaining the highest professional standards for our industry. Our members' products are made to the prescription of a licensed eye care practitioner; they are not supplied directly to the public. The lenses we manufacture are subjected to careful inspection by us and by the practitioner before they are fitted to the patient. A manufacturer who is unable or unwilling to enforce painstaking production and quality control measures does not belong -- and will not survive -- in this market.

Contact lenses are regulated as medical devices under the Federal Food, Drug, and Cosmetic Act (21 USC 321, _et_ _seq_.; hereinafter "Act"). Accordingly, our Association is vitally concerned with the implementation of the Act by the Food and Drug Administration (FDA) -- particularly the Medical Device Amendments of 1976 (Amendments).

We are aware that the FDA has presented a budget request to this Subcommittee which would maintain the pre-Gramm-Rudman-Hollings level of program operations. The projected program increases, which this funding would support, would be entirely in the area of new drug review.

The CLMA is concerned that such emphasis fails to reflect the present serious backlog in the FDA's approval of medical device premarket approval applications (PMA's). While the Act provides that these PMA's are to be processed by FDA within 180 days, only an estimated nine percent of such submissions are in fact being processed within this time frame. The result has been to threaten the continued viability of the small and medium contact lens manufacturers. If this situation is not remedied soon, the contact lens marketplace may become the sole domain of those few large corporations having the resources to wait out the FDA review process and meet the other inappropriately high regulatory costs imposed by present FDA regulations and policies.

The answer, however, is not simply to compound the present budgetary crisis by increasing the FDA's appropriation. More immediate and less costly improvement could be readily obtained by a revision in FDA policies. The agency's regulation of contact lenses and related products is anticompetitive and constitutes an unjustified drain on FDA's resources with no offsetting benefit to the public. The CLMA believes that this Subcommittee will wish to weigh requests for the commitment of additional funds against FDA's regulatory policies with respect to the regulation of contact lenses and related products -- such as lens cases and solutions. The continuation of such policies is especially unjustified in view of the economic realities which led to the Gramm-Rudman-Hollings deficit reduction legislation. FDA's anticompetitive regulation of contact lenses is expensive and diverts agency resources that are needed elsewhere.

Specifically, FDA's determination to keep daily wear contact lenses and products in class III -- the highest, and most expensive level of regulation -- has deluged the agency with needless PMA's for what are essentially innocuous products which clearly do not meet the statutory definition of class III (21 USC 360c(a)(1)(C)).

These contact lens-related PMA's constitute almost half of such submissions received by the agency. A long overdue agency reclassification of daily wear contact lenses out of class III would, accordingly, result in substantial FDA resources becoming available for other more pressing activities.

Daily wear contact lenses have been on the market in various forms since shortly after the close of World War II. The old fashioned "hard" (PMMA) contact lens has, in fact, been successfully regulated for years as a class I device.[1] Even the more recent hard lenses (termed "rigid gas permeable," or RGP) have now been in the market for almost ten years. Like the original PMMA Lens, the RGP lens is essentially an inert hemispheric shell. It does not belong in class III. As noted, the agency should reclassify it to a more appropriate level of regulation.

---

[1] In January of 1982, FDA proposed to place PMMA contact lenses in class II (47 Fed. Reg. 3694). The proposal is still pending. Since there is no performance standard for such lenses, their de facto level of regulation is class I (general controls). Further indication of the disproportionate regulatory treatment of RGP lenses is found in a review of the ophthalmic devices which FDA, following the advice of its expert panel, has proposed for class II, e.g. extracular orbital implant ("a device used in scleral surgery for buckling or building up the floor of the eye"), artificial eye ("a removable prosthetic device resembling the eyeball, usually made of glass or plastic"), and eye sphere implant ("an implanted device used to occupy the space in the eyeball following the removal of the contents of the eyeball").

As non-class III devices, such lenses would not have to go through the expensive and time-consuming PMA procedures. Freed of the unproductive task of processing scores of PMA's for innocuous contact lens products, the agency's valuable scientific staff could be redirected to addressing the many pressing tasks which have been pointed out to it by various critics -- both Congressional and private.

Thus, the agency has regulatory means to substantialy alleviate the shortages in funding to which it has directed the Subcommittee's attention.

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MAY 06 1986

April 29, 1986

Honorable Jamie Whitten
Chairman, House Appropriations
Subcommittee on Agriculture
Rural Development and Related Agencies
2362 Rayburn Building
Washington, D.C. 20515

Dear Mr. Whitten:

Enclosed are 15 copies of a statement in support of continuing appropriations for the Resource Conservation and Development Program of the Soil Conservation Service.

It is our hope that the subcommittee will again include the 26 million appropriation for the RC&D program.

Sincerely,

Dwight Spuller

Dwight Spuller, Chairman
N.W. Michigan RC&D Council

DW/jw
enclosures:

April 29, 1986

Statement to the House Appropriations Subcommittee on Agriculture, Rural Development and Related agencies in support of the Resource Conservation and Development Program of the Soil Conservation Service.

Again, this year, as in the past several years, we are requesting the Congress to support this program so vital to the people and resources of rural America. Rural areas have and will continue to add to the economic development of their communities while protecting, improving and making full use of the resources they have. With help of some Federal funds, there is a clear indication that these rural areas will increase their contribution to the well being of the nation.

We recognize the need to reduce the Federal Budget Deficit and we feel that by not requesting an increase in our appropriation for the last twenty years we are accepting what amounts to nearly a 10 percent decrease in funds available to us.

We find that those of us associated with the RC&D Program at the local, area and State level are contributing about $200,00 in volunteer time, travel and other expenses in Michigan. We hear no complaints from the volunteers who make these contributions, but continue to express their enthusiasm for the program and to propose additional projects that will improve life in their communities.

The local response to the RC&D program has proven the need for such a program. Forest management and marketing of forest products, agricultural land use and the marketing of agricultural products, development of recreation areas, assistance to governmental agencies, schools and colleges are areas of high priority in our RC&D area.

Identification of highly erosive area on a national wild and scenic river and 3 other streams in our area will initiate action that will improve water quality as well as providing better fish and wildlife habitat in these streams. Recently we sponsored a seminar on the use of wood products that attracted nearly 300 people, all eager for information that would use some wood products and hopefully provide some income to the land owners. We expect to continue to offer this kind of service to all the people within our program area.

We sincerely hope that the congress will continue to recognize the importance of the RC&D program and the benefits it offers to the rural areas it serves. With the leadership of the Soil Conservation Service and the people working with them we can continue to make this rural development program a vital force in the development of rural America

Dwight Spuller, Chairman
N.W. Michigan RC&D Area
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